

# NICHOLAS COUNTY

## Agriculture & Natural Resources

### January 2017



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

Cooperative Extension Service  
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### A Word from the Agent

Happy New Year Nicholas County Producers! I hope 2017 has started off on the right foot for everyone. 2016 proved to be a year of change in many ways; cattle prices fell throughout the year and as producers we had to learn to alter our management practices to stay afloat. As we look ahead to 2017 the only consistent thing that we are promised is, well.....more change. However, always remember what ever challenges or changes you face, we will be glad to assist in whatever ways we can here at the Extension Office!

We will be experiencing our own changes here at the Extension Office in the coming months. With the departure of agent Rachel Abney, the hunt for a new FCS/4-H agent to fill her position is currently underway. We should have a new agent ready to hit the ground running by early February! I will do my best to keep every one updated!

Speaking of being updated, there are several important things to look at in this newsletter. You will find an interesting article on frost seeding clover, Johne's disease, along with other timely tips for beef cattle herds. In addition to that information you will find that there are many classes and meeting coming up where you can learn some cool information. Keep in mind that any and all of these classes count as you CAIP project educational requirement! As always feel free to give me a call or stop by the office with any questions or concerns or just to visit!

Extension Agent for Agriculture and Natural Resource/  
4-H Youth Development Education – Nicholas County

### CAIP Update:

For those who have been approved to complete a CAIP (Phase 1) project, the due date for all projects to be completed, is April 28<sup>th</sup> 2017. You need all required paperwork and your project completed by this time! ***Required paperwork includes the educational class you are required to attend in order to be funded, there are opportunities listed for that in this newsletter.*** Also, before you start your project, you are required to bring in a copy of your driver's license and your most recent utility bill to verify your place of residence. We will make copies of these and keep them on file. If you can't make it into the office email is an option to get these to us as well. If you are building fence through this project, you need to obtain a map of the project area, trace the line of fence construction, and turn this in with the rest of your paperwork. If you are completing a large animal project you must be BQA (Beef Quality Assurance) certified (if you are not currently BQA certified, more of these classes will become available). If you have any questions about your project feel free to contact the Extension Office.

Cooperative Extension Service  
Agriculture and Natural Resources  
Family and Consumer Sciences  
4-H Youth Development  
Community and Economic Development

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LEXINGTON, KY 40546



Disabilities  
accommodated  
with prior notification.

## Beef Cattle Tips

### Spring Calving Herd

Divide the herd into groups for winter feeding --

weaned heifer calves

first-calf heifers, second-calvers and thin mature cows

the remainder of the dry cows which are in good body condition

herd sires

- Body condition is important, plan an adequate winter program for cows to be at least body condition score 5 (carrying enough flesh to cover the ribs) before the calving and breeding season. This will help them to breed early in the spring. Thin cows should be fed to regain body condition prior to winter. Don't let cows lose weight/condition.

- Begin feeding the lowest quality forage to dry cows which are in good condition during early winter and save the best hay for calving time or for weaned calves.

- Be sure that weaned heifer calves are on a feeding program which will enable them be at 65% of their mature weight before the start of the breeding season. Rations should be balanced to achieve gains sufficient to get heifers from their current weight to that "target" weight.

Order and number eartags for next year's calf crop this winter. It is also a good time to catch up on freeze branding and replacing lost eartags.

### Fall Calving Herd

- Have Breeding Soundness Evaluation (BSE) performed on bulls (even if you used them this spring).

- Get breeding supplies together, if using estrous synchronization and/or A.I.

- The fall breeding season starts. Breeding can best be accomplished on stockpiled fescue pasture; otherwise, cows with calves should be fed 25-30 pounds of good quality hay or its equivalent. Supplement with grain, if needed, and minimize hay waste. **DON'T ALLOW THESE COWS TO LOSE BODY CONDITION PRIOR TO OR DURING THE BREEDING SEASON.** It is easy to wait too long to start winter feeding. Don't do it unless you have stockpiled fescue.

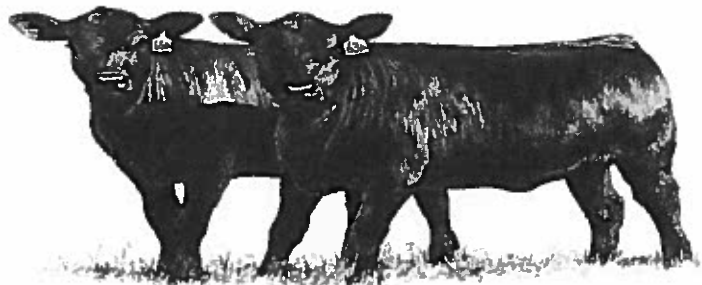
Observe performance of bulls during breeding season. Watch cows for return to estrus, if you see several in heat, try to determine the cause and consider changing bulls.

### General

- Monitor body condition and increase feed, if needed, for all classes of cattle.

- Complete soil testing pasture to check for fertility and pH.

Consider putting down geotextile fabric and covering with gravel in feeding areas before you begin hay feeding to minimize waste of expensive hay. Or, perhaps, construct concrete feeding pads for winter feeding areas.



## **Early detection is key to keep Johne's disease from taking over your beef herd**

*Source: Michelle Arnold, UK extension veterinarian*

Johne's, pronounced Yo-knees, disease is a chronic disease of severe, watery diarrhea and weight loss in adult cattle caused by a bacterium. These bacteria are very hardy due to a protective cell wall that can withstand harsh conditions and allows survival for long periods in the environment. Once the bacteria gain entry into an animal, the organism lives permanently within the cells of the large intestine where it multiplies and is then "shed" in the feces in large numbers. Johne's is a slow, progressive disease that calves pick up around the time they are born but the clinical signs of weight loss and diarrhea do not show up until much later, generally at 2-5 years of age or even older.

As cow/calf producers, it is easy to buy and sell breeding-age animals, especially bulls, with no obvious problems even though they are already infected with the disease. The problem is difficult to detect early, but infected animals often shed high numbers of the MAP organism on the farm. In ideal conditions with moisture and limited sunlight, bacteria can live 8 months in dry feces, 9-12 months in a manure pit/lagoon, 18 months in a water trough, 9-12 months in freezing temperatures and one or more years on pasture. This is important because the major route of transmission to newborn calves is nursing teats covered in Johne's-infected manure. A small number of calves may get the disease while still in the uterus of an infected cow or may ingest the organism from infected colostrum or milk. Once infected, there is a long incubation period, sometimes 2-7 years, then the disease begins to progress from a silent stage to an advanced disease stage. No effective treatment is available.

In a typical herd, for every animal in the advanced or clinical stage of disease, often there are many other cattle in earlier stages of the disease. Control measures center upon preventing exposure of susceptible animals to the infectious agent, identifying and eliminating infected animals from the herd and preventing entry of infected animals into the herd. With early diagnosis and prevention of spread, Johne's disease will not develop into a significant herd problem five to ten years in the future.

Buyers of breeding livestock should make every effort to purchase animals that are not MAP infected. Similarly, seedstock producers should anticipate this request and establish a routine of testing and culling any cattle that test positive for the organism. Seedstock herd owners are commonly reluctant to test for Johne's disease for fear that a positive diagnosis will ruin their reputation. However, a herd's reputation may be damaged much more severely by selling an infected animal to a customer and introducing this contagious, incurable disease into the buyer's herd. The U.S. Voluntary Bovine Johne's Disease Control Program specifies the testing requirements to officially classify a herd from Test Negative Level 1 (lowest) up to Level 6 (best). The more years of testing following this consistent regimen will yield greater confidence and knowledge of the true Johne's status of the herd.

So how do you begin? A screening test of all animals at least 2 years of age, such as the Johne's ELISA test for antibodies in blood, is rapid and low cost but not 100 percent accurate. Any positive animals on ELISA should be confirmed by detection of the Johne's bacterium in the feces by polymerase chain reaction. Both of these tests are available at the UK Veterinary Diagnostic Laboratory. For more information, visit their website <http://www.vdl.uky.edu>. Animals found positive should be removed from the herd promptly. Testing and culling over multiple years along with good herd management will lead to zero or low MAP test prevalence in your herd. Contact your local veterinarian to find out more about the control and prevention of Johne's disease.

For more information on livestock diseases and management, contact the Nicholas County Cooperative Extension Service.

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## Frost Seeding

The frost seeding method allows seeds to be inter-seeded into undisturbed soils by scattering seed on top of the ground. The freezing and thawing action of the soil works the seeds into the soil where they can germinate. In Kentucky, the ideal time to frost seed is between February 10 and March 1, with mid-February preferred. It is important to consider what forage species can be successfully frost seeded. Seeding red and white clover is recommended using this method. While it is possible to frost seed some grass species, it is typically less successful and generally not recommended. Using this technique can reduce machine use and seeding cost. It is also beneficial as it can be done at times when utilizing heavy machinery would damage pastures such as extremely wet periods. Individual pasture characteristics should also be considered when deciding if frost seeding will be successful on your farm.

Seeding nitrogen-fixing legumes into existing grass stands will reduce nitrogen fertilizer costs and can increase pasture yields and quality. Frost seeding legumes can be very successful when performed correctly using the best suited species. Red and white clovers are the most commonly used and establish well with frost seeding. Birdsfoot trefoil is another option and is often frost seeded in a mix with red clover. This non-bloating legume can be slow to establish and is often sparse until the second year. After established, this long-lived perennial legume has been shown to produce a healthy stand for 10 or more years. Annual lespedeza is another legume sometimes seeded using this low input method. This warm-season, non-bloating legume is fairly drought tolerant and will be very productive when cool-season forages are suffering from “summer slump.” It is not recommended to frost seed alfalfa because of highly inconsistent results.

Few grass species have been proven to be effective when frost seeded. In trials, perennial ryegrass and annual (Italian) ryegrass are the only grasses which established well enough to be a reasonable option when using this method. Orchardgrass has been somewhat successful under favorable conditions but frost seeding orchardgrass is not a suggested practice. It is recommended to drill most grass species for maximum success.

It is necessary to follow basic seeding and management guidelines for successful frost seeding. Having seed-to-soil contact is vital. Reduce the vegetative cover on the area to be seeded to allow more seed to reach the soil surface. Broadcasted seed needs to fall directly onto the soil surface in order to be worked into the soil through the freeze-thaw action that will occur. This can be accomplished by heavy grazing in the late fall and early winter or by mowing area to a low height prior to seeding. It may be more difficult to expose sufficient soil in existing stands of sod forming grasses.

Reducing competition from existing forages and weeds is also crucial for successful seeding. Similar to creating seed-to-soil contact, grazing or mowing closely will reduce competition. In the spring, weed pressure may increase and weeds may need to be controlled by management methods or by herbicide application to allow seedlings to establish. It is important to remember that existing clovers will be killed by herbicide applications. Be sure to read herbicide labels and follow recommended waiting periods before seeding clovers or grazing animals.

Although bloat may be an issue when grazing some legumes, a stand mixed with non-bloating legumes and grasses will reduce the likeliness of bloat. Basic management to reduce bloat should be followed as described in the UK Extension publication <http://www.ca.uky.edu/agc/pubs/id/id186/id186.pdf>. Adding legumes into existing pastures can benefit soil fertility and provide higher quality feed to livestock. Using the frost seeding method can save money on seeding costs and reduces machinery use.





## JANUARY 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	District Board 6pm	27
28	29	30	31			

## FEBRUARY 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	Fairboard 12pm At Office	3
4	5	6	7	8	9	Predator Control 6pm
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

**\* Classes are at Livestock Pavilion**

Feb 9: Predator Control for Beef Cattle and other Livestock. Dr Mathew Springer, Wildlife Specialist for the University of Kentucky will be presenting on this topic. The meeting will start at 6:00pm at the Nicholas County Livestock Barn and a meal will be served. **Please RSVP to the Nicholas County Extension Office by 2/2/17**

Feb 16: Beef Cattle Market Outlook/Update. Dr Kenny Burdine, Ag Economist from the University of Kentucky will be presenting on this topic. The meeting will start at 6:00pm at the Nicholas County Livestock Barn and a meal will be served. **Please RSVP to the Nicholas County Extension Office by 2/9/17**

March 7: Tobacco Meeting with GAP Training. Dr Bob Pearce, Tobacco Specialist with the University of Kentucky will be presenting on this topic. The meeting will start at 6:00pm and a meal will be served. **Please RSVP to the Nicholas County Extension Office by 2/28/17**

March 7: Farm Business Management Meeting. Dr Jordan Shockley, Ag Economist from the University of Kentucky will be presenting on this topic. The meeting will begin at 5:30 at the Bourbon County Fair Grounds. **Please RSVP to the Bourbon County Extension Office at 859-987-1895**



Nicholas County  
368 East Main Street  
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## Kale and Potato Soup

**4 teaspoons** olive oil  
**1** chopped yellow onion  
**3 cloves** garlic, minced  
**1 box** (48 ounce) low-sodium chicken broth

**6** red potatoes, diced  
**½ cup** chopped carrot  
**4 cups** shredded kale  
**½ pound** cooked chicken breast, shredded

**¼ teaspoon** black pepper

**1.** In a large saucepan, **heat** the olive oil over medium heat for 1 minute. **Add** chopped onion and garlic and **cook** uncovered for 5 minutes.  
**2.** **Add** chicken broth, potatoes and carrot; cover and bring to a boil.  
**3.** **Reduce heat** and simmer for 20 minutes.  
**4.** **Mix** in the kale, chicken and black pepper. **Cover and simmer** for 15

minutes or until kale is tender.

**Yield:** 6, 1½ cup servings.

**Nutritional Analysis:**

270 calories, 5 g fat, 1 g saturated fat, 25 mg cholesterol, 210 mg sodium, 43 g carbohydrate, 5 g fiber, 15 g protein.

Buying Kentucky Proud is easy. Look for the label at your grocery store, farmers' market, or roadside stand.

