

# Agriculture Newsletter Pulaski County

**FEBRUARY 2022**

T. J. Adkins, Agriculture & Natural Resources Agent



## DATES TO REMEMBER

**Weed program sign ups are in February through KDA**

- ▶ February 22nd 6pm—Cattle Handling and BQA Training with Dr. Morgan and Tarter Gate Company; Casey County Ag Expo
- ▶ February 28th 6pm– Tick Program; Hal Rogers Fire Training Center
- ▶ March 7th 6 pm: Tobacco Gap Training-Garrad Co. Extension Office
- ▶ March 9th 10am to 3pm: Ag Safety Program- Extension Office Basement
- ▶ March 22nd 6pm: Adapting your nutrient management plan for fertilizer prices with Dr. Josh McGrath. Hal Rogers training center; 6:00 pm
- ▶ March 28th 6pm: Estate Planning; Hal Rogers Training Center

**\*\*RSVP required for every event\*\***



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LEXINGTON, KY 40546



Disabilities  
accommodated  
with prior notification.

# UP COMING PROGRAMS

## Nuisance Weed Spraying Program

This program consists of weed spraying demonstration plots. The department will provide the sprayer and enough chemical for the treatment of 10 acres of agricultural land or 100 gallons of spot spraying mix to be used on agricultural land. The department's representative will demonstrate proper mixing and application techniques. A number of nuisance weeds can be treated under this program depending on the needs of the participant. This program is limited to broadleaf weeds.

Broadcast Spraying demonstration plots consist of:

10 acres of agricultural land will be treated with chemical provided by the department. Application is performed with a two-wheeled trailer type sprayer equipped with boomless nozzles. If additional chemical is provided by the participant, an additional 10 acres can be treated.

Spot Spraying demonstration plots consist of:

100 gallons of broadleaf chemical mix which is applied until sprayer is empty. Application is performed with a two-wheeled trailer type sprayer equipped with a handheld spray wand used by the tractor operator. If additional chemical is provided by the participant, an additional 100 gallons can be sprayed.

For each demonstration:

The participant must provide water source

The participant must provide tractor and operator

All chemical products must be labeled and the product label will be strictly followed

A maximum of 7 participants per county

This program is designed to target weeds that have a negative impact on the participant's agricultural production.

There will be an annual online application period to participate in this program.

Applications can be completed from February 1 to February 29.



**Contact the Extension office or visit <https://www.kyagr.com/consumer/nuisance-weed-spraying-program-application.aspx> for more information.**

**JUST A REMINDER, SIGNUPS FOR THE WEED PROGRAM ARE IN FEBRUARY**



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## DICAMBA TRAINING

Most of you are asking about when and where will dicamba trainings occur? Unfortunately I don't know. All three manufactures (Bayer, BASF, and Syngenta) still have not uploaded their 2022 online modules. It appears some in person trainings have been scheduled, but not within KY.

Both companies indicated they expect to have their online trainings up and running in the next couple of weeks (BASF has a goal of Feb 1).

# ENLIST DUO AND ENLIST ONE CHANGES

Last week the EPA announced some changes to the Enlist One and Enlist Duo labels. These changes were largely aimed at increasing the protection of endangered species. Fortunately, many of these changes will have a minimal impact on Kentucky growers.

One of the changes was an addition of a list of counties that are not allowed to use the products due to endangered species that might occur in a corn/soybean field. NO Kentucky counties were included in this list.

Another change was the addition of restrictions to manage runoff of the product. Below I have copied a table from the label with measures that must be conducted to mitigate runoff. For most KY soils you need to conduct enough measures to "earn 6 credits". After looking at the list most farmer can get to 6 fairly easily without making any changes to their system. For example practicing no-till earns you 4 credits and if you make only 1 or 2 applications you get another 2 to 4 credits. So basically easily achieved by practices most are already doing to preserve their soil.

The EPA announcement also had a lot of language about Corteva providing training materials for farmers on how to spray Enlist Duo and Enlist One. My interpretation is that Corteva is required to make the materials available and update them annually, but there is not a mandatory training for farmers to use the product.

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## MID-SOUTH STOCKER CONFERENCE ONLINE 2022

### GRASS TO CASH: FORAGE OPPORTUNITIES FOR STOCKER CATTLE

Due to continued high infection rates of COVID, the 2022 Mid-South Stocker Conference will once again be offered free of charge as an online program. Last year the conference was held online with good attendance and the decision was made due to uncertainties in meeting restrictions to hold the program online again this year.

The conference will be held on February 23, 2022 beginning at 12:00 pm EST. Topics to be covered this year include baleage production, grazing management, new research on respiratory disease, and a 2022 market outlook. The Mid-South Stocker Conference is a joint effort between University of Tennessee, University of Kentucky, and industry to offer an educational program for the stocker and backgrounding sector of the industry.

To register for the conference, the following online link will be available during the week of January 11th. The link is <https://tiny.utk.edu/22MSSC> for registering. Once registered, an email will be sent to participants to join the Zoom program prior to the event. For additional information go to <https://midsouthstockerconference.utk.edu/> or contact your local county Extension office or email [jeff.lehmkuhler@uky.edu](mailto:jeff.lehmkuhler@uky.edu). We hope you will join us on February 23 to hear from a great line-up of speakers.



# What To Do When Calves Are Born Weak

By: Michelle Arnold, UK Veterinary Diagnostic Laboratory

“Weak Calf Syndrome” is a term applied to a calf born alive but lacks vigor, is slow to stand, and may not attempt to nurse. Affected herds may also see an increase in stillborn calves. The known factors contributing to the development of weak calves include inadequate nutrition for the dam during pregnancy, difficult calving (known as “dystocia”) and infectious diseases, especially BVD virus. With excellent management, some weak calves will survive but most will die shortly after birth. Those that survive are prone to develop scours or pneumonia, grow slowly and have lower weaning weights. Although this situation is difficult to correct during calving season, identification and correction of the underlying problems will help prevent this syndrome down the road.

## Inadequate Pre-Partum Nutrition

Nutrition for the dam is key to preparing a calf for life outside the cow. Not only does the pregnant cow’s diet need to meet her own maintenance needs but, in the last 50-60 days of gestation, approximately 80% of fetal growth occurs requiring additional nutrients to support this tremendous growth and to develop the fetal brown fat needed to supply energy to the newborn until adequate colostrum is ingested. The two most important cow nutritional requirements are protein and energy, the exact amounts of each depend on stage of production, environment, and mature cow size. Research has shown that calves born to cows on inadequate diets have less vigor, less brown fat stores, less ability to warm themselves, and it takes a much longer time for them to stand after birth. Heifers and old or thin cows are more likely to have weak calves as they simply cannot compete for hay and feed and should be fed separately to allow them access to the nutrients they need.

Vitamin and trace mineral deficiencies have also been associated with weak calves. If cows are not supplemented with adequate amounts of selenium during gestation, the calf will be born with a severe selenium deficiency. This deficiency results in “white muscle disease”, a condition where calves are born with weak heart and skeletal muscles and frequently die soon after birth. In addition, both vitamins A and E are vital nutrients for cows to pass to the fetus but may not be adequate in poor quality forage. Always keep a good trace mineral mix with vitamins in front of the cows or mix it in supplemental feed to ensure calves are born with sufficient amounts.

## Dystocia (Difficult Birth)

A calf involved in a difficult birth will have decreased vigor and take longer to stand and nurse. A prolonged labor and difficult calving often results in a newborn calf with a swollen head or tongue, bruising, fractures, and excessive fluid in the trachea or lungs. Low blood oxygen in the calf (“hypoxia”) from prolonged labor will also impair the function of the central nervous system (brain and spinal cord). Additionally, a calf may have broken ribs that affect its ability to breathe. An easily observed sign of a difficult birth is brown or yellow staining of the calf’s hair coat from the meconium.

If a calf does not stand and nurse within one hour of birth, the calf must be fed colostrum either milked from the dam or use a commercial colostrum replacement. Colostrum should be given as soon after birth as possible, preferably within 1-2 hours, and repeated at no later than 6 hours after birth. Weak calves born during cold, wet weather with little brown fat can quickly develop hypothermia (low body temperature) and are unable to stand or nurse until warmed. A warm water bath, blow dryer, heat lamp or floorboard heat can quickly warm a cold calf. Beware of heating pads as they can cause burns.

# Infectious Causes-Bovine Viral Diarrhea (BVD) Virus and Leptospirosis

Both the BVD virus and the spirochete *Leptospira interrogans* serovar Hardjo infections have been defects such as a domed head, cleft palate, cataracts and other eye defects, or the calf may be born as a PI (persistently infected) calf. The other possible infectious cause of weak calf syndrome, Leptospirosis, is not fully understood but studies are on-going to determine its importance.

If pregnant cows in the herd have been losing weight, especially in late gestation, it is best to prepare for the birth of weak calves. Several measures should be instituted immediately to save as many calves as possible:

1. Check heifers and cows in labor frequently (at least 2-3 times daily) – Although producers are accustomed to watching heifers closely for calving difficulty, this recommendation should be extended to all late gestation cows. Once the water bag or hooves appear, the calf should be born within an hour to hour and a half. If the cow is not making progress, call your veterinarian for help. If early signs of labor are observed for several hours but the water bag does not appear, the calf may be breech (tail first) or abnormally positioned. Again, call for help quickly for a better chance to have a live calf.
2. Address nutritional needs and account for increased needs during severe weather. Test your hay then evaluate the protein and energy in the ration and address any deficiencies. Body condition score the cows and heifers due to calve in the next 60 days to evaluate their needs. In addition, remember that lactating cows have the greatest need for energy because they are producing milk. If you observe a young calf frequently attempting to nurse, it is unlikely to be getting enough milk from the dam and may need milk supplementation. If possible, separate cows according to their nutritional needs and feed them accordingly. Creep feeding calves will help the older calves continue to grow and lessen the burden on the lactating dams.
3. Identify the weak calves and institute special care – Normal calves should stand within 30 minutes of delivery and nurse within 30 minutes of standing. If the calf is slow to stand and nurse, intervention is necessary. It is important to dry the calf off, dip or spray the navel with disinfectant, warm the calf, and feed colostrum with an esophageal feeder to ensure it gets enough. Have a good quality commercial colostrum replacement (NOT supplement) on hand and ready to mix and feed. Do not delay because the longer the interval from birth to feeding, the fewer antibodies absorbed into the blood stream of the calf.
4. Provide shelter during harsh winter weather – Unrolling hay on the ground where there are windbreaks or in wooded areas provides some protection during times of intense rain and cold. A shed or barn can be beneficial but remember organisms that cause calf diarrhea build up very quickly in areas that stay moist and without sunlight. Barns should be clean, dry, and well-bedded if used for calving. If cows were not vaccinated with scours vaccine prior to calving, there are products available to give the calf by mouth at birth to aid in scours prevention.
5. Do your best to feed in different spots to avoid creating areas of deep mud. Calves and weak cows will get stuck in deep mud and die. Mud is very sticky and will trap weaker animals until they die of exhaustion, hypothermia or fall prey to a predator. Fields can be fixed when winter is over.

6. Diagnose the cause of unexpected death in newborn calves. Contact your local veterinarian and submit any calves that die due to unknown causes to the UK Veterinary Diagnostic Lab or Breathitt Laboratory in Hopkinsville.

The best strategies to prevent weak calves next calving season are a solid vaccination and deworming program, proper nutritional management, and avoiding dystocia. Not only will calf survival improve but pregnancy rates will increase as well.

Keep the following points in mind:

- Vaccinate open cows at least 4-6 weeks before breeding with a modified live 5-way viral respiratory vaccine (IBR, BVD Types 1 & 2, PI3, BRSV), with Vibriosis and the 5 strains of Leptospirosis.
- Consult your veterinarian about vaccination protocols in pregnant cattle and testing the herd for persistent infection with BVD virus.
- Test all hay and plan to provide enough protein and energy for cows and heifers with a balanced ration based on the stage of production (lactation, mid- or late gestation).
- Ensure a clean, uninterrupted water supply 24 hours a day, 7 days a week.
- Maintain a body condition score of 5 for cows (up to a 6 for heifers) to ensure adequate condition at calving.
- Allow cows access to some form of shelter in case of bad weather when calving. However, if unable to keep this area clean, calves are far better off being born outside in a grassy area.
- Have enough help on hand at calving to watch cows, assist with calving and treat weak calves if necessary. A strong relationship with your local veterinarian is exceptionally important for difficult calving situations and the evaluation and treatment of weak calves.

If an unvaccinated or poorly vaccinated cow is infected with the BVD virus during gestation, there are no good outcomes.



## Drone Pilot Certification Workshop

*An intensive prep course to obtain a drone pilot license*



**Course:**

**March 15 and 16, 2022**

9 am- 4 pm each day

(Lunch will be provided both days)

Hopkins County Extension Office  
75 Cornwall Drive  
Madisonville, KY  
Course: \$400

*For more information and to register  
contact:* Lori Rogers  
[Lori.Rogers@uky.edu](mailto:Lori.Rogers@uky.edu)  
270-625-2143

Course will be taught by Mandy Briggs, Certified Flight Instructor

**Exam:**

The exam takes  
approximately 2 hours and  
appointments  
will be scheduled on  
**March 17**

Exam: \$175

**Class size is limited!**

CCA: 12 CEUs

# FOOD, FARM & FUN NIGHT

**Tuesday March 8 2022 @ 6pm ET**  
Speaker: Lindsey New, Farm Service Agency

**WHERE:** Wayne County  
Extension Office  
255 Rolling Hills Blvd.  
Monticello, KY 42633  
**RSVP:** Facebook Event  
page or Extension office  
(606)348-8453

Bring an Ag related item to swap

**KENTUCKY WOMEN  
IN AGRICULTURE**

# INTERMEDIATE & ADVANCED SHEARING SCHOOL

WITH DOUG RATHKE  
AT THE UK SHEEP SCIENCE UNIT

APRIL 1-2, 2022

**THE KENTUCKY NATURAL FIBER CENTER**  
**Kentucky SHEEP & WOOL PRODUCERS ASSOCIATION**

April 1st & 2nd

C. Oran Little Research  
Center  
1171 Midway Rd  
Versailles, KY 40383

This 2-Day course will improve an experienced shearer's speed by learning tips about proper sheep positioning, developing an understanding of the importance of proper shearing footwork and learning how to reduce the number of strokes per animal.

RSVP & More Information  
<https://shoutout.wix.com/so/0fNxyHf#/main>

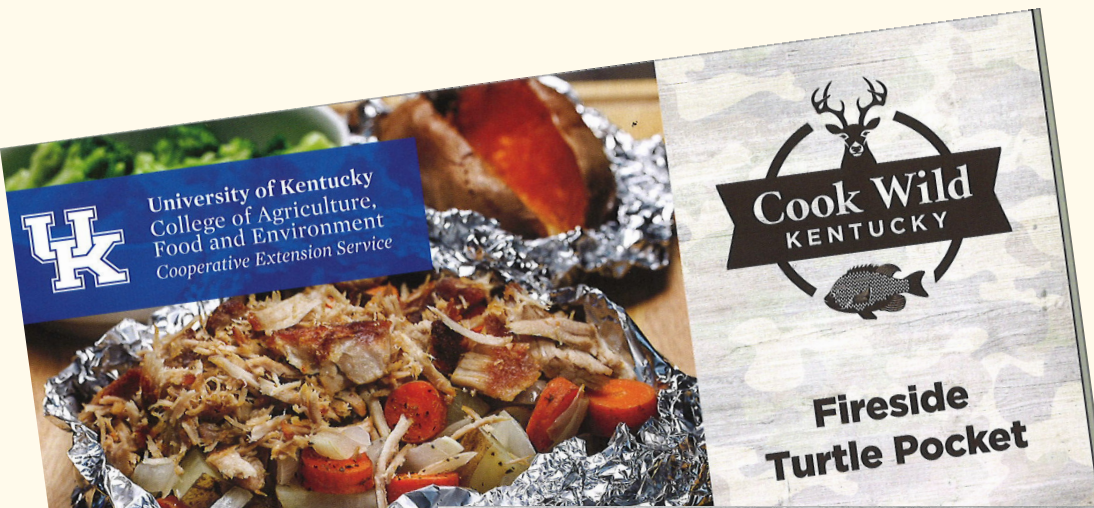
## INTERMEDIATE & ADVANCED SHEEP SHEARING SCHOOL



University of Kentucky  
College of Agriculture,  
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Cooperative Extension Service  
Agriculture and Natural Resources

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Pulaski County Extension Office  
P.O. Box 720  
Somerset, KY 42502  
Phone: 606-679-6361



### Fireside Turtle Pocket

- 4 large turtle legs, about 2 1/2 pounds
- 2 tablespoons dried minced onion
- 1 teaspoon black pepper
- Water to cover
- 4 tablespoons butter
- 4 large potatoes, peeled and diced
- 4 carrots, peeled and cut into 1-inch lengths
- 1 onion, chopped
- 3/4 teaspoon salt
- 1 teaspoon black pepper
- 1 teaspoon garlic powder

Place turtle legs, dried onion, and black pepper in a slow cooker. Add enough water to cover. Cook on high for 1 hour, reduce heat to low, and cook an additional 8 hours until meat is tender and falls off the bones.

Pick out the meat and discard the bones and cartilage. Place a long sheet of heavy-duty foil on a large cookie sheet. The ends of the foil will hang off the pan. Slice butter into pats onto the foil. Place potatoes, carrots, and onion in center of foil. Place turtle meat on top of vegetables, and sprinkle with salt, pepper and garlic powder. Bring ends of foil to center and fold to seal in juices. Bake at 450 degrees F for 40 minutes or until potatoes are tender.

**Yield:** 6 servings

Adapted from: Clinton Hardy's Sorgho Creek Turtle recipe.

Nutrition Facts	
6 servings per recipe	
<b>Serving size 12 ounces (475g)</b>	
Amount per serving	
<b>Calories</b>	<b>360</b>
% Daily Value*	
<b>Total Fat</b> 2g	<b>3%</b>
Saturated Fat 0.5g	<b>3%</b>
Trans Fat 0g	
<b>Cholesterol</b> 95mg	<b>32%</b>
<b>Sodium</b> 490mg	<b>21%</b>
<b>Total Carbohydrate</b> 42g	<b>15%</b>
Dietary Fiber 7g	<b>25%</b>
Total Sugars 7g	
Includes 0g Added Sugars	<b>0%</b>
<b>Protein</b> 42g	
Vitamin D 0mcg	0%
Calcium 282mg	20%
Iron 4mg	20%
Potassium 1508mg	30%

\* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

