APRIL 2024 ISSUE

# AGRICULTURE & NATURAL RESOURCES NEWSLETTER

Cooperative Extension Service

april.wilhoit@uky.edu

**Cooperative Extension Service** 

Fleming County P.O. Box 192; 1384 Elizaville Rd Flemingsburg, KY 41041 Office Phone: (606) 845-4641 extension.ca.uky.edu

A Monthly Newsletter by Fleming County Extension Office





# IN THIS ISSUE:

Cattle Timely Tips: 2
CAIP Education Options: 3

Healthy Recipe: 3 Forage Timely Tips: 4

Composting Horse Manure: 4

Hay Production Field Day: 5 Rotational Grazing: 6

Feeder Cattle Markets: 7-8

Grasslands Partnership: 8

Fencing School: 9

My-Busting BVD Virus: 10-12

Shearing School: 12

It's Alfalfa Weevil Time: 13-14

UK Wheat Field Day: 14
Beekeepers Meeting: 15

SOW App & Important Dates: 16

# A Note From Your Agent:

Happy Spring All,

It's crazy to think we're almost already a month into Spring 2024. The winter programming is coming to a close as we're wrapping up the Farmers Market Education Program this month. We had great attendance at the Cattle Grading program on April 9th at the stockyards. It was our first time hosting it in Fleming County. Special thanks to Jim Akers and Farmers Stockyards.

We're looking forward to the Quality Hay Production Field Day on May 10th, 2024. More info can be found in this newsletter. We hope that you can make it!

As always, if you have any questions or suggestions for programming, please let me know.

apil D. WOLT

April Wilhoit

Lexington, KY 40506

#### Cooperative Extension Service

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

#### MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

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 bellef, sex, sexual orientation, gender (educative, gender expression, pregnancy, martial status, genetic information, age, vetzenn status, physical or mental disability or reprisal or restaliation for prior civil rights activity. Reasonable accommodation of disability may be available with prior notice. Program information may be made available in languages other than English. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.





# **Timely Tips**

Les Anderson, Extension Professor, University of Kentucky

## **Spring-Calving Cow Herd**

- Watch cows and calves closely. Work hard to save every calf (you can cull/sell them later). Calves can be identified while they are young and easy to handle. Commercial male calves should be castrated and implanted. Registered calves should be weighed at birth.
- Cows that have calved need to be on an adequate nutritional level to rebreed. Increase their feed after calving. Don't let them lose body condition. Keep feeding them until pastures are adequate.
- Don't "rush to grass" although it can be really tempting. Be sure that grass has accumulated enough growth to support the cow's nutritional needs before depending solely upon it. Cows may walk the pastures looking for green grass instead of eating dry feed. This lush, watery grass is not adequate to support them. Keep them consuming dry feed until sufficient grass is available to sustain body condition. We've spent too much money keeping them in good condition to lose it now!
- Prevent grass tetany! Provide magnesium in the mineral mix until daytime temperatures are consistently above 60oF. Mineral supplement should be available at all times and contain a minimum of about 14 percent magnesium. Make sure that your mineral mix also contains adequate selenium, copper, and zinc. You can ask your feed dealer about the UK Beef IRM High Magnesium Mineral.
- Make final selection of heifer replacements. Strongly consider vaccinating with a modified-live BVD vaccine. Vaccinate at least 60 days before the start of the breeding season.
- Purchase replacement bulls at least 30 days prior to the start of the breeding season. Have herd bulls evaluated for breeding soundness (10-20% of bulls are questionable or unsatisfactory breeders). Get all bulls in proper condition (BCS 6) for breeding.
- If you are going to use artificial insemination and/or estrous synchronization, make plans now and order needed supplies, semen, and schedule a technician.
- Prebreeding or "turn out" working is usually scheduled for late April or May between the end of calving season and before the start of the breeding season (while cows are open). Consult your veterinarian about vaccines and health products your herd needs. Plan now for products needed and have handling facilities in good working order. Dehorn commercial calves before going to pasture.

#### **Fall-Calving Cows**

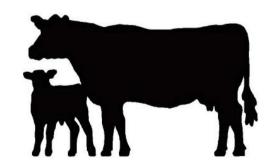
- Pregnancy check cows now and cull open ones at weaning especially if the open cows are older than 5 years of age.
- Re-implant feeders.
- Consult with your veterinarian about preweaning working the herd.
- You may let calves creep-graze wheat or rye if it is available. Calves will benefit from extra feed until spring grass appears.
- Plan marketing strategy for feeder calves.

#### **Stockers**

- Don't go to pastures too soon, give plants some growing time. Then stock at two to three times the July rate and rotate rapidly.
- "Condition" purchased calves prior to grazing.
  They should be processed and fed a
  conditioning diet prior to being placed on
  pasture. You can also use this time to
  introduce them to electric fences which are
  used in rotational grazing.
- Provide a good mineral supplement which contains a rumen modifier (Rumensin, Bovatec, etc.) along with adequate levels of copper and selenium.

## **General**

- We've made a muddy mess this winter, so be prepared to reseed bare spots. Our forage group has some excellent information on restoring heavily traffic areas.
- Make plans to improve hay feeding areas to avoid muddy conditions like we have faced this winter. Consider geotextile fabric with gravel or concrete feeding pads.
- Prepare for the grazing season. Check fences and make necessary repairs. Check your corral, too.
- Get everything ready to make high quality hay in May! Have equipment serviced and spare parts on hand. Order baler twine now. Be prepared to harvest an adequate supply of hay when you have the opportunity. Re-supply the extra hay that you fed out of the barn. This past winter caused most producers to exhaust their hay supply, so it's time to re-stock.
- Plan now for fly control ... decide what fly control program that you will use but don't put insecticide eartags on cattle until fly population appears.



# CAIP EDUCATION OPPORTUNITIES- FLEMING COUNTY

## **ONLINE AT ANYTIME:**

- Visit: https://anr.ca.uky.edu/caip-training for instructions
- Visit: https://campus.extension.org/enrol/index.php?id=1970 to access the online training site

# **ADDITIONAL OPPORTUNITIES:**

• Programs listed in this newsletter

CONTACT: (606) 845-4641 OR APRIL.WILHOIT@UKY.EDU FOR MORE INFO

# **Crunchy Fruit and Chicken Salad**

Servings: 6 Serving Size: 1 cup

## **Directions:**

- 1. Mix all ingredients and chill for at least one hour. Serve cold.
- 2. Garnish with raisins if desired.

## Make it a Meal

- Crunchy Fruit and Chicken Salad
- Fresh Greens
- Carrot sticks
- Whole grain crackers
- Low-fat milk

**Source:** Rita May, Senior Extension Associate, Nutrition Education Program, University of Kentucky Cooperative Extension Service.

Nutrition Info: 130 calories; 2g total fat; 0.5g saturated fat; 0g trans fat; 40mg cholesterol; 45mg sodium; 14g carbohydrate; 2g fiber; 15g protein; 2% Daily Value of vitamin A; 10% Daily Value of vitamin C; 4% Daily Value of calcium; 4% Daily Value of iron



# **INGREDIENTS**

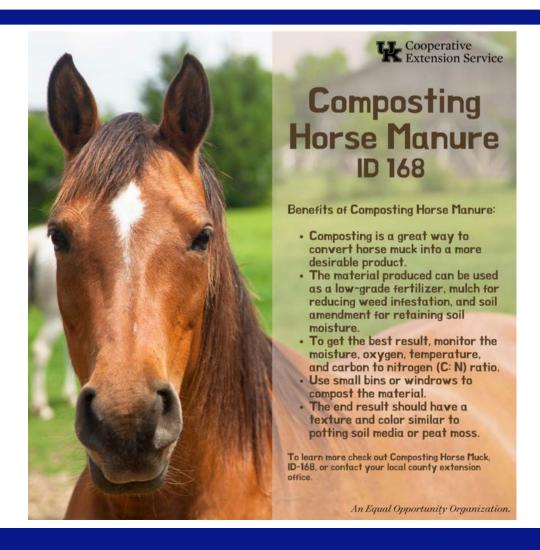
- 2 cups chicken, cooked and diced
- 2 apples, diced
- 1 cup pineapple chunks, drained
- ½ cup celery, diced
- ¼ cup vanilla or plain yogurt
- ¼ cup chopped nuts, optional





# **Forage Timely Tips: April**

- Graze cover crops using temporary fencing.
- As pasture growth begins, rotate through pastures quickly to keep up with the fast growth of spring.
- Creep-graze calves and lambs, allowing them access to highest-quality pasture.
- Finish re-seeding winter feeding sites where soil disturbance and sod damage occurred.
- As pasture growth exceeds the needs of the livestock, remove some fields from the rotation and allow growth to accumulate for hay or haylage.
- Flash graze pastures newly seeded with clovers to manage competition.



# **QUALITY HAY PRODUCTION**

# FIELD DAY





# FRIDAY, MAY 10, 2024

LOCATION: 1965 MARTHA MILLS RD, FLEMINGSBURG

# 9:00AM-2:00PM

RAIN DATE: FRIDAY, MAY 17

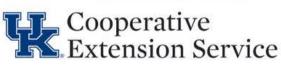
 9:00AM: REGISTRATION, DONUTS, & VENDORS OPEN

 10:00AM-NOON: UK SPECIALISTS COVER VARIETY OF TOPICS ON WEED ID, VISUAL COMPARISIONS OF HAY QUALITY AND MORE!

NOON: LUNCH & VENDORS
12:30PM: LOCAL EQUIPMENT

12:30PM: LOCAL EQUIPMEN DEALERSHIPS DEMOS









# USE THE QR CODE OR CONTACT YOUR LOCAL OFFICE TO REGISTER:

BRACKEN COUNTY: (606) 735-2141 FLEMING COUNTY: (606) 845-4641 LEWIS COUNTY: (606) 796-2732 MASON COUNTY: (606) 564-6808

ROBERTSON COUNTY: (606) 724-5796



PLEASE REGISTER BY: MAY 3RD

# Getting paid for grazing rotationally

By: Dr. Jimmy Henning for Farmers Pride.

In my first posting in forage extension, a grazing guru was making a big splash in the popular press touting that rotational grazing will let you double your stocking rate. The logical conclusion is that a grazier could double their income by dividing pastures. To me, this was completely illogical because adding fence changed nothing about the productivity of a pasture. Or does it? Even the wildest claims can have a grain of truth in them. I now know that whether rotational grazing pays depends on many factors, such as stocking rate, soil fertility status, grass/forage base, and even the size of the grazing animals.



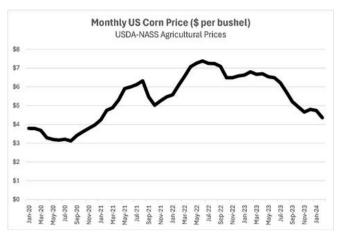
Let's start with stocking rate. Rotational grazing may allow you to increase your stocking rate if you are severely understocked. It may be difficult to visualize how a field will yield more when rotationally grazing compared to set stocking at very low stocking rate, but research has shown that it can. One study compared the annual productivity of grass at five different grazing intensities from zero to 80%. The plots allowed to grow all season with no defoliation yielded less than those defoliated at 20 or 40%. Non-defoliated plots yielded less because shading caused by the old growth inhibited the emergence and growth of new grass. So depending on the initial stocking rate, rotational grazing may allow a doubling of stocking rate, at least for a while.

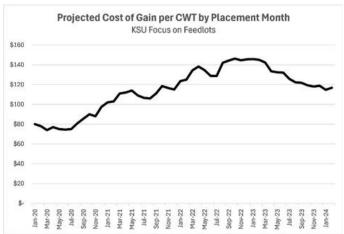
Another reason rotational grazing pays is related to the stocking rate effect. When you move from a set stocked pasture to a sub-divided system, you prevent the shading that limits yield. The forage stays in an active growth stage for more of the year, and that fresh growth is green, leafy and very high in quality. Forage quality is therefore nearly always greater under rotational grazing. Rotational grazing lets you eat more of what you grow. Early in the evolution of our understanding of intensive grazing, there was a tendency to graze too close and too often because of this new ability to subdivide pastures. Over time, graziers have learned that high utilization can be overdone. This evolution of understanding has led to the general recommendation of 'take half and leave half' as a guide for grazing intensity for grasses. Another guide is to always leave some green leaf area on defoliated forage grasses.

Regrowth in grasses will be faster when there is green leaf tissue left after grazing. This principle is especially true for the more erect grasses like orchardgrass and the native grasses. When defoliation results in bare ground, weeds can encroach and soil temperatures are elevated. This heating is especially detrimental to cool season grasses. Rotational grazing pays because we can incorporate high yielding legumes like red clover and alfalfa into the sward. Rotational grazing allows you to manage for a 30 day period of rest between defoliations which is the key to legume persistence. This 30 day rest is the length of time needed to recharge the carbohydrate reserves in the taproot. This carbohydrate reserve is what drives the new legume growth after defoliation.~ excerpted from article

# **Prospective Plantings, Feed Prices and Implications for Feeder Cattle Markets**

By: Kenny Burdine, University of Kentucky





Input prices have been a major topic of discussion over the last couple of years. As I write this, we are enjoying some extremely high cattle prices. But those high prices have been at least somewhat offset by increases in production costs. This has been true of feed, fertilizer, fuel, machinery, labor and many other inputs. On the heels of USDA's Prospective Plantings report, it seemed to be a good time to discuss recent trends in feed prices and the impact this tends to have on feeder cattle values.

For some recent perspective, the US average corn price per bushel is tracked in the figure above from January 2020 through February 2024. One can quickly see the low-price levels during COVID, price levels exceeding \$7 per bushel during 2022, and the significant price decreases seen through the 2023 season. Corn tends to be the market leader and trends in corn price are typically representative of other feedstuffs. Clearly, the corn price dynamic has changed over the last year and will likely continue to do so in the coming months.

The demand for feeder cattle is derived from the demand for fed cattle. So anything that impacts the profitability of finishing cattle will impact the value of feeders. For this reason, feeder cattle values are heavily impacted by the cost of taking those feeder cattle through to finish, and feed prices are the most significant cost of doing that. I am also showing projected cost of gain from Kansas State University's Focus on Feedlots monthly reports in the second chart. Note how closely projected cost of gain follows corn price per bushel. As corn price rises and feedlot cost of gain increases, this gets reflected in lower feeder cattle values – feedlots cannot pay as much for feeders. As corn prices decrease, lower feedlot cost of gain leads to higher feeder cattle values as feedlots place feeders in the lower cost environment. While there are a large number of factors behind the strength of feeder cattle prices over the last year, lower feed prices have been part of story.

Finishing costs also impact value of gain on feeder cattle, which is reflected in the market through value differences across cattle at different weights. When finishing costs are high, feedlots tend to bid less aggressively on smaller calves and lean towards placing heavier feeder cattle. This tends to result in higher prices for heavy feeders relative to calves. This is sometimes described as a tightening, or narrowing, of price slides. As this happens, the value of lbs that are added prior to feedlot placement increases, and more incentive is created for cow-calf and growing operations to sell heavier feeder cattle. As feed prices have fallen recently, this incentive has also changed a bit. By no means am I suggesting that incentives to sell larger feeders don't exist, but I do think the value of gain on feeder cattle has decreased from where it was this time last spring.

Coming full-circle, planting intentions impact feeder cattle markets because they impact the supply of feedstuffs and that has feed price implications. Late March's Prospective Plantings report suggested a significant shift was expected with nearly a 5% decrease in corn acreage from 2023. The report also projected a 6.3 million acre decrease in prospective plantings of all principal crops, which would seem to suggest there is potential for more acreage to be planted in 2024. CME© corn futures did increase after the report came out, but were down a bit as I wrote this on Monday April 1st. In reality, this is just the beginning and actual planted acreage will respond to this information and many other factors this spring. But it definitely suggests the potential exists for tighter corn supplies going forward. The full Prospective Plantings report can be found here.

# **Grasslands Partnership Project**



The Fleming County Cooperative Extension Service has been selected among a dozen counties in Kentucky to participate in a USDA funded, multi-state project referred to as the "Grasslands Partnership". The goal of this project is to implement and demonstrate climate smart practices that improve grasslands management and, in turn, improve farm

This project is focused on documenting the impact of six grassland management practices on soil carbon storage, input costs, profitability, productivity, and, for some practices, responses of grassland birds and pollinators. Participants are required to install at least three of the designated practices and required to maintain them for a 5-year period. Support will be provided to implement practices.

productivity, profits, and access to future markets that may expect enhanced environmental benefits.

During the 5-year period, participants will allow researchers access to their farms to collect data on the impacts made as a results of the practices. Participants will also be required to maintain detailed grazing management, fertilizer, herbicide, and seeding records. One or more field days will also be held on each participating farm.

The six grassland management practices included in this program are as follows:

- <u>Perennial Native Grasses</u>- Participants will establish a minimum of 5 and up to 25 acres of big bluestem/
   Indiangrass/little bluestem seed mix or switchgrass. Proper grazing management practices will be applied.
- <u>Perennial Grass/Forb Buffers</u>- Participants will establish 60 feet wide buffers (2-10 acres total) around row crop fields to reduce runoff and encourage habitat for birds and pollinators.
- Alternative N Sources- Participants will establish and maintain 5-30 acres of legumes. No nitrogen may be applied during the 5-year period. Acres enrolled will include grazing management practices.
- Improved Grazing Management- Participants will implement improved grazing practices on 10 to 30 acres.
   Managed grazing heights will be implanted and grazing will begin when enrolled field reaches 10 inches and livestock will be removed when residue reaches 4 inches.
- <u>Silvopasture</u>- Participants will establish 2-10 acres of silvopasture. Silvopasture, a sustainable agroforestry
  practice, involves the intentional integration of forage, trees, and livestock. Silvopastures offer potential for
  numerous environmental, economic, and social benefits, including improved soil health, increased biodiversity,
  enhanced livestock responses, and diversified income streams for farmers.
- <u>Novel Soil Amendments</u>- Participants will apply biochar or gypsum, to slow soil N transformations and losses
  from the soil and increase rates of carbon sequestration. Measurements will be collected on forage productivity
  and nutritive value, as well as carbon sequestration and the mitigation of greenhouse gases in grasslands.

Of the above listed six practices, a minimum of three practices must be implemented by the participant. In addition, the participant must have a field that undergoes their normal management. In other words, "business as usual". Data will be collected from this field to further document improvement made from the practices implemented.

If you would like to know more about the Grasslands Project, contact April Wilhoit at the Fleming County Cooperative Extension Service at (606) 845-4641 or april.wilhoit@uky.edu.

# Organized and Sponsored by the Kentucky Forage and Grassland Council, UK Cooperative Extension Service, and the Master Grazer Program

This program is designed for producers and agricultural professionals to learn the newest fencing methods and sound fencing construction through a combination of classroom and hands-on learning

WHEN: April 23-Morehead, KY

April 25-Mayfield, KY

WHERE: Derrickson Agricultural Complex

Richardson Arena 25 MSU Farm Drive Morehead, KY 40351

**Graves County Extension Office** 

4200 State Route 45 N Mayfield, KY 42066



High tensile and fixed knot woven

wire fencing!!!

Space is

LIMITED...

Register today!!!

COST: \$35/participant -- includes notebook, refreshments, safety glasses, hearing protection, and catered lunch

Registration DEADLINE: 2 weeks prior to workshop

# **ONLINE Registration with Credit Card:**

Morehead, KY https://Spring24FencingMorehead.eventbrite.com

Mayfield, KY https://Spring24FencingGraves.eventbrite.com

Registration by U.S. Mail: Caroline Roper

UK Research and Education Center

P.O. Box 469

Princeton, KY 42445

Name:_		
41/04/04/1999		

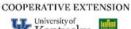
City: State: Zip code:

Email:\_\_\_\_\_ Cell Phone: \_\_\_\_\_

**Total Cost** Number of participants x \$35 per participant =

# Make CHECKS payable to: KFGC







Kentucky Master Grazer Educational Program



Kentucky For more information contact Caroline Roper at 270-704-2254 or Caroline.Roper@uky.edu

2024 Kentucky Fencing Schools

# Myth-Busting BVD Virus Eradication: Is it Possible in KY Cow-Calf Operations?

Dr. Michelle Arnold, Ruminant Extension Veterinarian

"BVD" or "Bovine Viral Diarrhea" virus contributes to a wide range of reproductive, respiratory, and digestive system diseases in cattle. Although symptoms of the initial virus infection are typically mild such as fever and possibly off-feed for a day, there is much more going on than meets the eye. In calves, the BVD virus is immunosuppressive, predisposing infected calves to secondary bacterial infections particularly in the lungs, leading to significant sickness and death loss from bronchopneumonia in the stocker/backgrounder sector. In naïve, susceptible (nonvaccinated or poorly vaccinated) adult cows and heifers, infection with the BVD virus often goes completely unnoticed but ultimately results in reproductive failure, including infertility, early embryonic deaths, abortions, stillbirths, malformed calves, and weak newborns depending on phase of gestation when the female becomes infected. If a pregnant, susceptible cow or heifer is infected with the BVD virus between 42-125 days of gestation, the virus will also cross the placenta, infecting her unborn calf. When this calf is born, it is "persistently infected" or "PI" and is a "carrier" of the virus for its lifetime. The dams that experience a transient infection while pregnant will be negative when tested for BVD but their PI calves will test positive. BVD Persistently infected or "PI" animals are the most unique epidemiological feature of the BVD virus. "PI" animals are the major reservoir for the virus and the reason it continues to exist today. A BVD-PI calf is born with the BVD virus and serves as the primary source of virus transmission because they continuously shed enormous amounts of virus particles throughout their lives in feces, urine, saliva, and nasal discharge. Many die at an early age but if a PI survives to adulthood, virus is also secreted in milk, semen, uterine secretions, and aborted fetal membranes. Approximately half of PI animals appear absolutely normal, and infection can only be detected through testing. The virus is deposited in watering troughs, feed troughs, cattle trailers-virtually everywhere the PI animal goes-and picked up by the other cattle in the pen or herd. Vaccines used in adult cattle against BVD (including those with Fetal Protection claims or "FP" vaccines) will reduce the chance of fetal exposure but protection is never 100%. Use of a modified live (MLV) BVD vaccine, with at least one two-shot (primary and booster) series given to breeding age heifers, is necessary to provide strong BVD PI protection as killed vaccine has not proven effective in this regard.

Currently there is much debate surrounding BVD PI calves, including how to best identify and remove them since one PI animal may expose 200-300 other animals or more to the virus during shipping, in auctions, when commingled in stocker/backgrounder operations and through fence-line contact with neighboring cattle. Several European countries, including Switzerland, Ireland, Scotland, and Germany, have substantially reduced or successfully eradicated BVD virus through national programs based on testing newborn calves and removing those that are PI positive. Of those countries, Germany is probably most comparable to Kentucky's situation in that they began in 2011 with a high prevalence of BVD, their cattle industry involves frequent trade and transport of cattle, and BVD vaccination is permitted (both killed and modified-live). From 2011 to 2016, the proportion of PI animals in Germany dropped from 0.5% at the start of the control program to just 0.03% PIs remaining, with 48,000 PI cattle removed in 5 years. Although Germany's "success story" of a mandatory, nationwide control program is enviable, could something similar be implemented in the U.S., including in Kentucky?

To begin, Germany has, as of November 2023, 10.8 million total cattle (3.7 million dairy cows and 625,000 beef cows) with over 4 million calves born annually on just over 127,000 farms. Approximately one quarter of the farms have over 100 head, while a little over 50% of farms have under 50 head. When the control program began in 2011, Germany had a high prevalence of BVD (0.5%) despite vaccination use, and a considerable amount of cattle trade and transport. For comparison, Kentucky has, as of January 2024, significantly fewer head at 1.89 million total cattle (907,000 beef cows) with 920,000 calves born in 2023. Kentucky's land mass is approximately 3.5X smaller than Germany, with 73,500 farms in the Commonwealth at the end of 2022 with an average farm size of 176 acres. The BVD prevalence in KY is estimated to be, on average, 0.4% or 4 PI animals per 1000 head, most of which are young, lightweight calves.

The German control program began in 1998 as a voluntary effort run independently by the 13 individual federal states. Costs were high and essentially no progress was made over a 10-year period. In 2008, the German government unveiled a consistent, nationwide BVD eradication program with two major objectives; 1) the fast and efficient removal of PI



animals and 2) the establishment of certified BVD virus-free farms. Beginning in January of 2011, the eradication program was implemented with the following rules:

- 1. Mandatory testing of all newborn calves within the first 6 months of life, shortened to 1 month of age from 2016-2021.
- 2. Immediate elimination of all detected Pls.
- 3.Only BVD negative animals could enter commerce/be sold. In 2016, movement restrictions were imposed on farms with BVD, including pregnant animals could not be sold until after calving and a negative test result of the offspring since a negative dam can deliver a PI positive calf.
- 4. Prevent reinfection on negative farms through implementation of biosecurity and vaccination protocols.

To remove PI cattle, a case definition was required to describe what legally constitutes a PI animal. A persistently infected ("PI") animal was defined as:

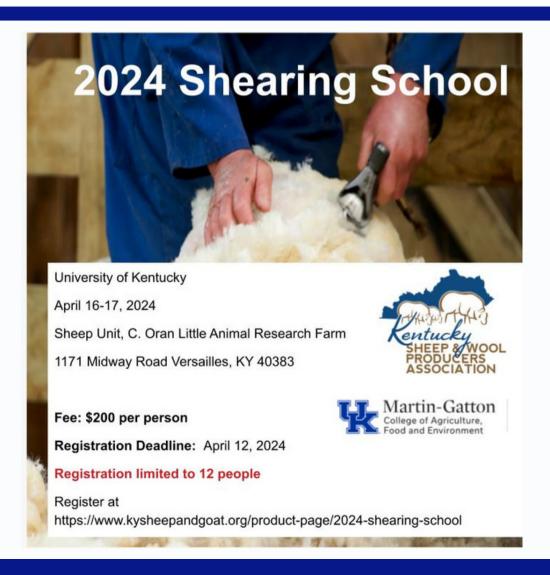
- 1.Tested positive for the BVD virus antigen with an ELISA test (primarily by ear notch in calves or blood test in adults) or the BVD virus genome with PCR. If desired, producers were allowed to test any positive animal a second time, up to 40 days later, to differentiate PIs from transiently (short-term) infected ("TI") animals.
- 2.All offspring of a PI positive dam were considered positive without the need for a test since a PI positive cow will always produce a PI positive calf.
- 3.Any cattle diagnosed with mucosal disease, a fatal form of BVD that involves severe and bloody diarrhea, rapid weight loss, ulcers in the mouth, nose and interdigital areas of the hoof, and death, only occurs in PI cattle.

Between the start of mandatory testing in 2011 and 2022, there were approximately 5 million BVD tests run per year, including all calves born, any follow-up confirmatory testing of positives, and any imported cattle. The proportion of PI animals was reduced each year starting with 0.5% (23,792 PI calves among 4.9 million newborn calves) in 2011 to less than 0.001% (55 PIs among 4.3 million newborns) in 2022. In the first 5 years, PI animals were found on over 8000 farms in 2011 and only 324 farms in 2016, meaning more than 99.8% of all German cattle farms had no PI animals detected in 2016. The final phase of eradication involves molecular sequencing of the virus in the remaining PI animals to trace back to their herds of origin and contact herds.

In summary, BVD virus exposure can be quickly and substantially reduced, primarily through early testing and removal of newborn PI calves before they ever leave the farm of origin. However, many questions remain as to how a control program would be implemented and the effect this reduction in PIs would have on overall cattle health. BVD-infected cow/calf herds experiencing losses in reproductive performance and higher calf morbidity and mortality would ultimately benefit from diagnosing and eliminating BVD virus but at the cost of testing and subsequent culling of PI animals. Is there sufficient value to the industry in removing BVD-PIs to compensate the cow/calf

sector for those additional costs? Should producers receive indemnity payments for PI calves that must be euthanized and, if so, what is a PI calfs value? Are calves that test BVD negative worth more? It is important to understand that even one PI in a pen of cattle or in a cattle pot results in continuous virus exposure for the rest.

In the stocker/backgrounder world, BVD virus is just one contributor to the bovine respiratory disease (BRD) complex involving numerous pathogens (viruses and bacteria) interacting in many ways in a wide range of management and environmental conditions across multiple types of operations. Although BVD is not the ultimate cause of death, its immunosuppressive impact increases the severity of infections by other BRD organisms and often increases morbidity and mortality rates, especially in recently weaned, lightweight calves. However, it is not known how much BRD's impact would be reduced if enhanced BVD control could be achieved. The most commonly used sample for identifying PI cattle is skin, usually taken as an ear notch. Blood (serum) can also be used but not in calves less than 3 months old. Any BVD ELISA positive test result can be confirmed, if desired, by segregating the animal and retesting a second ear notch or blood drawn at least 3 weeks after the first sample. True PI animals will remain positive after 3 weeks while transiently infected ("TI") will test negative. Remember PIs are considered defective and there is a legal, moral and ethical obligation to dispose of these animals without sending or returning them to commerce. In Kentucky, transportation or sale of BVD positive animals is prohibited by law unless approved by the State Veterinarian. Positive animals may be euthanized, immediately slaughtered (does not affect meat), or quarantined and fed to slaughter in an isolated location or permitted feedlot



# It's Alfalfa Weevil Time!

By Ric Bessin, Entomology Extension Specialist

The UK Ag Weather Center's degree day model for alfalfa weevil indicates that by the third week in March, many counties in Kentucky have exceeded 190 Degree Days (DD), which is used as a starting point to begin scouting. In fact, alfalfa weevil damage has already appeared in some fields. Once temperature accumulations reach 190 DD, growers are advised to look at their alfalfa fields and conduct weekly alfalfa weevil larval counts and compare those to the economic thresholds listed below.

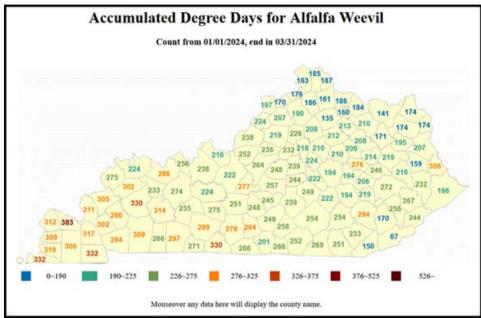


Figure 1: When degree-day totals reach 190 Degree Days, it is time to begin scouting for alfalfa weevil larvae. Scouting should continue on at least a weekly schedule until regrowth after the first cutting. Treat the DD totals for the counties as estimates.

Fall-laid alfalfa weevil eggs are the first to hatch in spring. These eggs hatch earlier than eggs laid in spring, and 190 DD approximates when first leaf feeding damage becomes noticeable. Temperature extremes during the winter help to limit the survival of alfalfa weevil eggs that were laid in stems in fall. Damage by young larvae will first appear as tiny pin holes in alfalfa leaves.

#### Scouting

To scout for alfalfa weevil, use the stem sampling method.

- 1. While walking in a "U" or "Z" pattern through a field, collect 30 alfalfa stems, carefully cup the top of each stem in one hand and break off the crown with your other hand; place the stem bud-end downward in a plastic bucket. Be sure your samples are at least 20 feet from the edge of a field so that they are representative of the entire interior of a field
- 2. Knock the stems in groups of 4 or 5 stems at a time against the inside of the bucket to dislodge the larvae.
- 3. Count the number of larvae.
- 4. Measure the length of 10 random alfalfa stems.

If the field is close to harvest, harvest can be an alternative to spraying, but producers need to watch for damage to the regrowth. There are similar scouting tables for regrowth after the first cutting.

# Alfalfa Weevil Larvae Thresholds for Spraying 190 to 225 Degree Days (Check your degree days)

Average stem height (inches)	Number of alfalfa weevil larvae on 30 stems
2	27
4	67
6	100
8	130

# Alfalfa Weevil Larvae Thresholds for Spraying 226 to 275 Degree Days

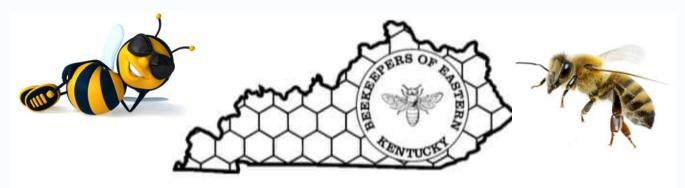
Average stem height (inches)	Number of alfalfa weevil larvae on 30 stems
2	15
4	19
6	20

For degree day accumulations above 275, use the economic threshold tables in ENTFACT 127 or ENT-17 to determine the need to spray the field for alfalfa weevil.

#### **Avoid Pesticide Resistance**

If you do need to treat for alfalfa weevil larvae, keep in mind that insecticide resistance to pyrethroid insecticides has been an issue in some areas. The best strategy to manage pesticide resistance is to use an insecticide only when necessary and to rotate modes of action each year. For many other pests, you would rotate more often, but alfalfa weevil has only one generation per year. To rotate modes of action, select insecticides that have a different IRAC group number on the label.





# SPRING MEETING

**DATE**: MAY 4, 2024

**REGISTRATION STARTS** AT 8 AM, SPEAKERS START AT 9 AM

LOCATION: MOREHEAD STATE AG FARM IN MOREHEAD, KY

ADDRESS: 25 MSU FARM DRIVE, MOREHEAD, KY 40351

SPEAKERS THIS SPRING WILL BE DIVIDED INTO 2 GROUPS:

- WANNA BE BEEKS & BEGINNER BEEKS: DISCUSSIONS AND DEMONSTRATIONS WILL BE CENTERED AROUND WELCOME TO BEEKEEPING, WHAT TO EXPECT YOUR FIRST YEAR, NECESSARY EQUIPMENT & HOW TO LIGHT A BEE SMOKER
- INTERMEDIATE & ADVANCED BEEKS: DISCUSSIONS WILL BE CENTERED AROUND SINGLE DEEPS AND HONEY PRODUCTION, MAKING SPLITS, QUEEN REARING, AND MORE
- AT THE END OF THE DAY, EVERYONE WILL COME TOGETHER FOR GREAT DOOR PRIZES & TALKING ABOUT BEEKEEPING AT THE LOCAL AND STATE LEVEL.

\*\*THERE WILL ALSO BE HIVE DEMONSTRATIONS--BE CERTAIN TO BRING YOUR BEE SUIT/VEIL AND GLOVES\*\*

COST: FREE

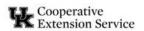
THIS IS FOR BEGINNER TO ADVANCED BEEKEEPERS--AND THOSE EVEN THINKING ABOUT GETTING BEES!

HOTELS WITH BLOCKS OF ROOMS (IF YOU NEED TO STAY IN MOREHEAD):

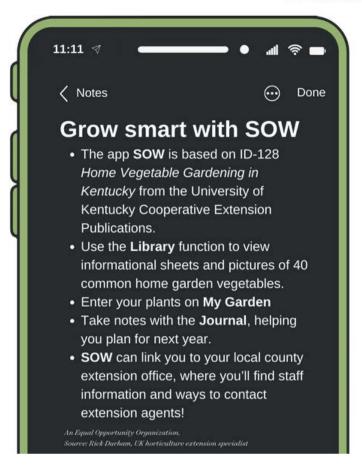
- COMFORT SUITES 606-462-2141
- HAMPTON INN 606-780-0601
- BEST WESTERN EAGLES INN 606-780-7234

THERE WILL BE A FOOD TRUCK ON HAND IF YOU DO NOT WISH TO VENTURE OUT FOR LUNCH: WILLY BOYS FOOD TRUCK

AFTER THE EVENT, THERE WILL BE AN OPPORTUNITY TO GO TO THE HONEY AND BEE CONNECTION FOR ALL OF YOUR BEEKEEPING NEEDS







# **Important Dates**



- April 16-17 | 2024 Shearing School | C. Oran Little Animal Research Farm, Versailles
- April 23 | 2024 Kentucky Fencing Schools | MSU Farm, Morehead | 8:00AM
- May 7| Farmers Market Business Meeting | FCEO | 6:00PM
- May 10 | Quality Hay Production Field Day | Martha Mills Rd, Flemingsburg | 9:00AM
- May 14 | UK Wheat Field Day | Princeton | 8:00AM CT
- May 27 | Memorial Day Holiday | Offices Closed
- June 15 | Farmers Market Opening Day! | 8:00AM
- June 19 | Juneteenth Holiday | Offices Closed