The March 2022 Edition of:



Cooperative Extension University of Kentucky Marshall County 1933 Mayfield Highway Benton, KY 42025 (270) 527-3285 extension.ca.uky.edu

Kentuckv

Hello 70 degrees!!! False Spring is here!

Due to popular demand, I am excited to announce that the "Raising the Steaks **Beef Dinner**" has been rescheduled for March 29th! See page 3 for rsvp information

and program details. I am looking forward to learning more about **pink eye and fly control** since it caused you all so much grief last season.

Attention grain producers! Please rsvp for the upcoming "Grain Grower's Night Out" dinner shown on page 2. I need a head count for the meal!

Want to be a beekeeper? Checkout page 8. This program will teach you everything that you need to know to get started.

As this meeting season winds down, I hope everyone had the opportunity to take advantage of the many diverse programs that I provided for you all. Now, like grain growers are gearing up for planting season and beef producers have a calving season, it's time for me to re-gear and prepare for "question season." Happy Spring.



TIMELY TIP FENCING TUNE-UP

Pasture growth goes from 0 to 60 in a matter of weeks. Being ready to utilize rapid spring growth is critical. March is a good month to check and repair fences, clear limbs that may have fallen over winter, check energizers and make sure that temporary fencing supplies are ready to go.

IN THIS ISSUE:

GENERAL

P. 4 IMPACT OF GOVERNMENT PAYMENTS **P.8 INTORDUCTION TO** BEEKEEPING



P.2 GRAIN GROWER'S NIGHT OUT DINNER

📅 Livestock

P.3 RAISING THE STEAKS BEEF DINNER P. 5 POISON HEMLOCK AND BUTTERCUP CONTROL P.9 AVIAN FLU

HOME HORT.

P. 6 FEATHERED FRIENDS **P.6 OUTDOOR POWER** TOOLS P.7 BACKYARD TOMATOES



RECIPE OF THE MONTH

P. 10 ASPARAGUS HAM QUICHE



Marshall County Extension's annual update for grain growers. Join us for dinner and discussion on the hottest topics facing grain growers!

Carbon Markets

Are carbon markets the newest way to cash in on practices you are already doing?

Grain Bag Storage Systems

Advantages, disadvantages and economic costs for bag storage systems for grain

New Soybean Disease

Disease update and overview of Red Crown, which was found in Kentucky for the first time last season in Graves Co.

March 24th 5:30-7:30pm Marshall County Extension Office 1933 Mayfield Hwy. Benton, KY 42025

Meal graciously provided by:



Please RSVP by calling (270) 527-3285

Grain Crops 2

Join us for a hot meal and presentations on the hottest issues facing beef producers!

University Of Kentucky Beef Cattle Veterinarian, Dr. Michelle Arnold, is traveling all the way from Lexington to talk to Marshall County beef producers about:

Rescheduled



Tuesday <u>March 29th</u> 5:30pm Marshall County Extension Office 1933 Mayfield Hwy. Benton, KY 42025

College of Agriculture, Food and Environment

Meal graciously provided by:

Peel Holland

Must RSVP by calling (270) 527-3285 by March 25th

Beef Cattle 3

Impact of Government Payments

Jerry Pierce, KFBM Program Coordinator



How important is a new farm bill? That depends on a number of factors like what you grow, where you farm, and what happens during a year to trigger payment to you. What impact have farm bills and other government programs had on Kentucky farms in terms of profitability over the last decade? They appear to have had a considerable effect. The graph shows Total Net Farm Income (NFI) for crop farms participating in the Kentucky Farm

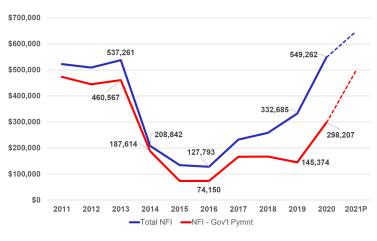
Business Management (KFBM) program between 2010 and 2020, and projections for 2021. Projections are based on USDA forecasts applied to average KFBM 2020 crop farms. The graph also shows Net Farm Income minus Government Payments. This represents net farm income from farm operating alone without government assistance. The gap between the two equals government payments.

The 2008 Farm Bill provided direct payments to farmers that supplemented high net farm income from farm operating alone. However, payments were critical to KFBM crop farms in 2010 suffering from late-season drought. A new Farm Bill was not passed, so the 2008 bill was extended through 2013. A new farm bill went into effect in 2014 that replaced direct payments with payments based on price or revenue targets. The first payments were made in 2015. This left a void in government support programs for 2014. Unfortunately, commodity prices fell dramatically in 2014 and net farm income for KFBM crop farms fell 65% from a record high in 2013. Government payments averaged only \$15,430 per farm, mostly from conservation programs. Payments under the 2014 Farm Bill were critical as NFI from farming activities alone was slow to recover, remaining under \$200,000 for KFBM through 2019. This was a turbulent time in agriculture as low revenue created a weakening of financial health and an increase in farm closures and bankruptcy.

Retaliatory tariffs on agricultural commodities from trade wars with China held back net income from farm operating in 2018 and 2019. Market Facilitation Program (MFP) payments offset the impacts of the tariffs in these years to help return crop farms to higher profitability by 2019. Average government payments from all programs, including MFP, grew to \$187,311 for KFBM crop farms; 56% of Total NFI in 2019. COVID-19 payments, existing government programs, and increased profitability from farming operations combined to push Total NFI to a record high in 2020. Average payments grew to \$251,056 for farms participating in KFBM, but this represented only 45% of Total NFI. This does not include PPP loans and Employee Retention Credits. Total NFI is projected to be even higher for 2021, but government payments are

projected to be 60% less without COVID-19 payments. These KFBM farms will receive about \$100,000 less than in 2021, though the amount is still higher than the 10-year average.

Government programs have supported crop farm incomes most years. The lack of support was painfully apparent in 2014. Resumption of government payments provided underlying support during the following turbulent years. MFP contributed substantially to offset the impact of Chinese tariffs on agricultural commodities that were depressing farm income. COVID-19 programs further contributed to a rebound of Total NFI in 2020. The impact of farm bills and other government programs on farm profitability has been significant. ~



General

Control Efforts for Poison Hemlock and Buttercups Begin in Late Winter



Dr. J.D. Green, UK Extension Weed Specialist

Late winter is one of the best times of the year to assess fields and fencerows for presence of cool-season weeds. Further, the preferred time to implement control tactics can often be in March as daytime air temperatures begin to rise and are maintained above 55F. This is when cool-season weeds are younger and begin their active vegetative growth before initiating flowers later in the spring. Winter annual and biennial weeds typically germinate from seed in the fall and produce flowers during the spring.

Poison hemlock is easily recognized throughout the winter and early spring. Classified as a biennial, it often grows as a winter annual in Kentucky, particularly plants that germinate during the previous fall. Poison hemlock plants form rosettes that remain green throughout the winter in a somewhat semi-dormant stage (Figure 1). These young rosettes are often found in areas where poison hemlock was present the previous year, particularly along fence rows and other isolated areas. Younger plants can be identified by their fern-like leaves with leaf petioles that have purple spotting and no hairs. After resuming active growth in late winter, they form larger rosettes. Later flower stalks elongate during the spring producing clusters of white flowers in June. Mature plants can grow up to 6 to 9 feet tall (Figure 2).

The best time for control using herbicides is generally when plants are in the younger rosette stages of growth in late February and early March. Herbicide products containing 2,4-D, dicamba+2,4-D (eg. Weedmaster, Brash, Rifle-D, etc.), and aminopyralid (i.e. GrazonNext, DuraCor) are the preferred choices for obtaining effective control. Effectiveness of chemical control can decrease as plants begin to elongate and become more mature. Poison hemlock plants can be toxic to animals; therefore, when using herbicidal control methods on larger plants it is important to remove animals from treated areas. Animals are more likely to graze poison hemlock plants following herbicide treatment than before. On mature plants mechanical methods such as mowing can be an alternative control method if infested areas are accessible. Mowing and other mechanical control efforts should be done after flower stalks elongate but before plants begin to flower.





Another common weed we observe during the spring in grazed pasture fields are the buttercups (Figure 3). Various species of buttercup (Ranunculus spp.) are likely to be found in Kentucky. These include Bulbous, Creeping, Hispid, Tall, and Smallflower buttercup. Although their leaf shape, flowers, and other characteristics may vary, many buttercup plants can be noticed by their yellow flowers, commonly with five waxy-like petals. Like other winter annual weeds, buttercup often emerge in the fall, but they can also germinate in late winter and early spring. The peak of the flowering period usually occurs in April, but may persist into May. When flowers are observed, new seed may already be in development on the flower stalks.

Buttercup is more frequently found in fields or field areas that are utilized or heavily grazed in the fall and winter months. This results in thin, bare areas throughout the field creating an environment whereby buttercup seed can readily germinate and seedling plants can thrive. Therefore, one long-term control strategy involves utilizing management practices which help promote growth of desirable forage species and minimize bare areas. Continued on page 7....

Did You Take Care of Feathered Friends?



Kelly Jackson, UK Extension Horticulture Agent

Winter is a hard time for birds to find natural foods like wild cherries and dogwood and holly berries. We can help by putting out feeders filled with seed, along with suet, pine cones smeared with peanut butter and even fruit halves. It will help supplement their diet and provide enough food to get them through the winter.

Most birds will eat just about anything you put out, but there are some birds who have preferred foods. If you select the foods of birds that you want to see, then you will be less likely to get nuisance birds like starlings, grackles and crows. You are better off not to buy seed mixes as they contain peanut hearts, which are attractive to starlings. You will have better success if you buy black oil-type sunflower seed and

white millet separately, in bulk. These are often cheaper than seed mixes too. Black oil sunflower seed will attract most seedeating birds. Millet will attract sparrows, cowbirds and dark-eyed juncos. Platform feeders will accommodate most birds. They can also lead to a lot of seed loss and waste, as the birds will knock the seed around and fall to the ground. If you want to attract specific birds, choose a feeder for that type bird. Gold and house finches prefer a tube feeder with a small opening for nyjer thistle or hulled sunflower seeds.

Don't forget that birds need water too. Keep a bird bath or water source close to feeders, and be sure the water is fresh and not frozen, as it tends to freeze in winter. Place the feeders in an open area where there are deciduous and evergreen trees, with shrubs nearby, so birds can escape for shelter. House cats can be a problem around bird feeders as they will lay in wait to ambush the birds for a meal. If you have a cat, consider putting a collar with a bell on it, so birds can escape before being attacked. Keep your feeders clean by periodically using hot, soapy water and a capful of bleach to remove old, dried seed. Platform feeders might hold water and should have small holes drilled into the bottom to allow water to drain.

Contact the Marshall County Cooperative Extension Service for information on feeding birds in winter. ~

Ensure Outdoor Power Tools are Ready



Andy Rideout, UK Extension Horticulture Agent

Before you crank up your mower, tiller, weed eater or blower this spring, you need to make sure they are ready to go. Did you leave gasoline in any of your power tools over the winter? If this happens this spring when you go to crank it up, you may need a skilled mechanic to clean the tank and carburetor. Gasoline can leave a gummy residue inside your equipment's carburetor and fuel tank that may cause them to break down over time. The residue gets sucked into tiny holes inside the carburetor and stops it up. Always be sure to drain the fuel at the end of the season and add fuel stabilizer to the tank. We often neglect our equipment during the year while we are using it regularly. Before the season begins, be sure to drain the old oil and replace with a fresh oil change.

Continued on page 7.

Horticulture 6

"Control Efforts for Poison Hemlock and Buttercups Begin in Late Winter" Continued:

Interseeding more desirable forage species may be another practice to consider. This is not always practical in some fields that are essential for winter feeding.

In the short-term, herbicide treatment in early spring is an option. Herbicide products that contain 2,4-D, or other broadleaf type pasture herbicides are generally effective on most buttercup species. To be most effective, herbicide treatment should be completed when plants are in the vegetative stages of growth before flowers develop and produce new seed. Hence, herbicide applications should normally occur by late March. Treatments after flowering offer little benefit since buttercup plants are already producing new seed and plants die back naturally by late spring and will not be present the remainder of the year. If you do see developing cool-season weed problems as we transition from late winter into early spring you may need to take action soon to begin to correct these problems. In general, herbicide products that contain 2,4-D are usually effective on younger rosettes of poison hemlock, biennial thistles, and buttercups. Another course of action in the spring is a "wait and see" approach before implementing a control tactic. Yet, keep in mind that smaller weeds are easier to control using herbicide treatments than after they increase in size and become more mature. ~

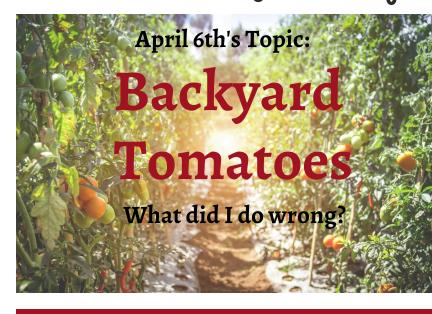
"Ensure Outdoor Power Tools are Ready" Continued:

Add the new oil according to manufacturer's specifications and include a new filter if necessary. Be sure to properly dispose of the used oil. The air filter is the most often overlooked and without question, the most important maintenance item, on many pieces of equipment. An air filter ensures only clean, dust free air enters the combustion chamber. Filters may either be disposable or the washable sponge type. Wash with warm water and a small amount of soap. Be sure to rinse and allow it to thoroughly dry, then add some engine oil to the sponge, as the oil will allow the sponge to collect dirt and debris even better.

Be sure you look over your equipment for signs of wear, like worn or rusty cables. Some lubricating oil can help rusty cables tremendously before they get stiff and break. Clear any debris or build up on the tines of your tiller, or around the blades of your mower. Clean equipment runs much better. Don't forget to clean around the engine. It produces a lot of heat, wearing down the metal and decreasing the engine's life. A dirty engine retains more heat than a clean one. Look at the underside of your mower. Grab the blade, pushing it up and down and turning the blade in the opposite direction that it normally turns. If there is any movement, you could have bad bearings in the spindle. Repairing them now could save you from more expensive repairs later.

These maintenance items are fairly simple and can add to the life of your equipment. You may need a skilled mechanic, which can be more expensive, or you might even be able to do the repairs yourself. Either way, get some advice from a local repair shop for recommendations. ~

Lunch Break Gardening Series Ken



Join Extension Agent, Nikki Rhein, as she discusses what can go wrong when growing backyard tomatoes and how to prevent these problems this season! Join us during your lunch break for a gardening workshop!

University of

College of Agriculture, Food and Environment

\$10 Includes BBQ Lunch from Hutchins Restaurant

1st Wednesday Monthly 12:15-12:45pm at the Marshall County Extension Office



Horticulture 7

Introduction to Beekeeping Series

So, you want to be a beekeeper? This series is intended to teach the basics of beekeeping while offering an informal setting where inexperienced beekeepers can ask the questions they need answered

April 7th

Introduction to Beekeeping: - Equipment with Andy Todd - Bees with Kevin McClain -Hives with Bob Dotson Q & A

April 14th Review and Round Table Discussion

Cost: Free!

Time: 6:00 pm

Location:

Marshall County Extension Office 1933 Mayfield Hwy Benton, KY 42025 (270) 527-3285



Brought to you by the Marshall County Extension Office and the Clarks River Beekeepers Assoc.

Beekeeping 8

ALERT!

Avian Influenza in Kentucky

Information for bird owners

Highly Pathogenic Avian Influenza (HPAI) has been found in Kentucky. It is a contagious disease of birds, typically <u>deadly to domesticated poultry</u>.

WHAT KINDS OF BIRDS ARE AT RISK?

HPAI is highly contagious and often fatal for domesticated poultry, including **chickens**, **turkeys**, **pheasants**, **quail**, **ducks**, **geese**, and **guinea fowl**. It can be carried by free flying migratory waterfowl, such as ducks, geese, and shorebirds.

DOES HPAI INFECT PEOPLE?

Properly cooked meat and eggs from birds are safe to eat. Always remember, cooking poultry and eggs to an internal temperature of 165°F kills bacteria and viruses. According to the U.S. Centers for Disease Control and Prevention, these avian influenza detections do not present an immediate public health concern. No human cases of these avian influenza viruses have been detected in the United States.

HOW IS HPAI SPREAD?

The disease is spread by direct contact between birds, by coughing and sneezing, and through droppings. People can spread HPAI by moving infected birds, moving contaminated equipment and feed, and by wearing clothing and shoes that have been in infected areas.

WHAT DOES HPAI LOOK LIKE IN BIRDS?

Some signs of HPAI include sudden death of poultry without clinical signs, respiratory signs (nasal discharge, coughing sneezing), a lack of energy or appetite, decreased water consumption, decreased egg production or soft-shelled or misshapen eggs.



kyagr.com/hpai

WHAT <u>YOU</u> CAN DO TO HELP

- If you think your birds are sick please immediately call the Sick Bird Hotline at: 866-536-7593
- Keep your birds away from other birds.
- If you visit family or friends with birds, shower, wash your clothes, and change your shoes before handling your birds
- Don't visit them without taking these same steps if you have handled your birds.
- Try to keep people who also own birds from visiting your property
- Share information about HPAI with family and friends

SICK BIRD HOTLINE: 866-536-7593

Poultry 9



Asparagus Ham Quiche

1 pound fresh asparagus, trimmed and cut into ½ inch pieces

cup, finely chopped ham
 small finely chopped onion
 (8 inch) unbaked pie shells

 egg white, slightly beaten
 cups shredded reduced fat cheddar cheese
 large eggs
 container (5.3 ounces) plain Greek yogurt ✓3 cup 1% milk
✓4 teaspoon
✓4 teaspoon salt
✓4 teaspoon
✓4 teaspoon

Preheat oven to 400 F. Place asparagus in a steamer over 1 inch of boiling water and cover. Cook until tender but still firm, about 4-6 minutes. Drain and cool. Place ham and onion in a nonstick skillet and cook over medium heat until lightly browned. Brush pie shells with beaten egg white. Spoon the ham, onion and asparagus into pie shells, dividing evenly between the 2 shells. Sprinkle 1 cup shredded cheese over the mixture in each shell. In a separate bowl, beat together eggs, yogurt, milk, nutmeg, salt and pepper. **Pour** egg mixture over the top of the cheese, dividing evenly between the 2 shells. **Bake** uncovered in a preheated oven until firm 25-30 minutes. Allow to cool approximately 20 minutes before cutting.

Yield: 16 slices

Nutritional Analysis: 200 calories, 11 g fat, 4.5 g saturated fat, 65 mg cholesterol, 370 mg sodium, 14 g carbohydrate, 1 g fiber, 3 g sugars, 10 g protein.

Kentucky Asparagus

SEASON: April through May.

NUTRITION FACTS: Asparagus is a good source of vitamin A and folate. One-half cup of fresh, steamed asparagus has 22 calories, 2 grams of protein, and 4 grams of carbohydrate.

SELECTION: Choose bright green stalks with tightly closed tips. The most tender stalks are apple green in color with purple-tinged tips.

STORAGE: Fresh asparagus will keep 1-2 weeks in the refrigerator. Refrigerate upright with cut ends in water or with cut ends wrapped in wet paper towels in a plastic bag.

PREPARATION: One pound of asparagus will yield 4 one-half cup servings, about 6 spears per serving. Wash asparagus thoroughly in cool, running water. Eat asparagus raw or lightly boil, steam, stir-fry, or grill. Overcooked asparagus will be mushy. Try seasoning it with herbs, butter, or Parmesan cheese.

KENTUCKY ASPARAGUS

Kentucky Proud Project

County Extension Agents for Family and Consumer Sciences University of Kentucky, Dietetics and Human Nutrition students COOPERATIVE

March 2015

Educational programs of Kentucky Cooperative Extension serve all people regardless of race, color, age, sex, religion, disability, or national origin. For more information, contact your county's Extension agent for Family and Consumer Sciences or visit <u>www.uky.ag/fcs</u>



EXTENSION

Source: www.fruitsandveggiesmatter.gov

For more information go to: http://marshall.ca.uky.edu/AgNaturalResources or follow us on Facebook @marshallcountyanr

Nikki Rhein

Agent for Agriculture and Natural Resources

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. UNIVERSITY OF KENTUCKY, KENTUCKY STATE UNIVERSITY, U.S. DEPARTMENT OF AGRICULTURE, AND KENTUCKY COUNTIES, COOPERATING