Bourbon County Cooperative Extension Service

AGRICULTURE & NATURAL RESOURCES NEWSLETTER





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



Lindsay Arthur

Lindsay Arthur Agent for Agriculture & Natural Resources Lindsay.arthur@uky.edu

Bourbon County Extension Service

603 Millersburg Road Paris, KY 40361 Office: (859) 987-1895 Fax: (859) 987-3120 bourbon.ca.uky.edu

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

Upcoming Events:

- April 18th— Conservation District Annual Meeting
- April 21st— Spring Open House
- April 25th— Beef Quality & Care Assurance Training
- May 1—CAIP & YAIP Deadline

More details about events inside newsletter



ALL CAIP & YAIP PAPERWORK IS DUE MAY 1ST, 2023.

CAIP ADMINISTRATOR BELINDA GRAVES WILL BE AT THE EXTENSION OFFICE APRIL 26TH, 27TH, 28TH & MAY 1ST FROM 1:00 PM- 4:00 PM TO TAKE ALL PAPERWORK AND ANSWER ANY QUESTIONS YOU

HAVE.

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LEXINGTON, KY 40546

Conservation District Plans 62nd Annual Dinner Meeting

The Bourbon County Conservation District will host its 62nd annual dinner meeting on Tuesday, April 18, 2023, at 7:00 p.m. at the Church of the Annunciation, Parish Hall on High Street in Paris. This event will celebrate our farming community and honor individuals who have contributed to our goals of promoting conservation in Bourbon County by their works and their achievements.

Our guest speaker will be Stephen M. Vest, the editor and publisher of Kentucky Monthly Magazine. He is a sixth-generation Kentuckian and the author of three books, as well as the publisher of a dozen others. Vest and his wife, Kay, have four grown children and live in Frankfort.

We look forward to an informative meeting with good food and fellowship among conservation minded folks. Please make your reservations **to ensure a seat and meal** by April 14th at 859-987-2311 extension 3 or email <u>bourboncountyconservation@gmail.com</u>.



Sensitivity of USDA's 2023 Ag Outlooks Forum Projections to Yield

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m A}$ t the 2023 Ag Outlook Forum, the United States Department of Agriculture (USDA) released its first projections for the 2023 crop year. This article examines the sensitivity of the stocks-to-use (STU) ratio to yield projection errors by the USDA. STU is the ratio of end-of-year commodity stocks over to-tal commodity use. The USDA releases estimates on commodity supply, demand, exports, and imports, all of which are accounted for in the STU. As yield projections have a large margin of error in February, trendlines estimate future yield, which typically results in a higher yield projection than the previous year. It is worth noting that this analysis extrapolates USDA projections and does not control for mar-ket-changing factors such as weather or geopolitical tensions. Results indicate that soybean STU ratios are extremely sensitive to changes in yield which may indicate soybean price volatility. One limitation of this analysis is that we assume the USDA projections for harvested acres are correct, meaning the changes in production levels only come from missed yield projections. In reality, changes in harvested acres could offset yield-driven production changes. The analysis also does not consider potential changes in use that may occur as market conditions evolve. Outlook Forum Projections can be found at https://www.usda.gov/oce/ag-outlookforum/commodity-outlooks.

Sensitivity to Yield

The STU ratio is typically given as a percentage and uses a simple calculation to quantify the estimated level of stocks at the end of the market year and the total crop demand. The formula for calculating STU is:

STU is a crucial measure in commodity marketing, providing some perspective on supply and demand for the commodity of interest. The numerator (top of the equation) quantifies the ending stocks of the commodity, and the denominator (bottom) quantifies the demand. Higher STU levels suggest that the market has more cushion to absorb supply shocks, while lower STU indicates that there is very little room for the market to handle decreases in production. Lower STU levels also mean that commodity prices are more sensitive to demand shocks; however, we focus on supply in this analysis.

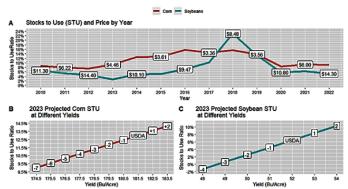
Plot "A" shows the STU and prices for corn and soybeans from 2010-2022. The most important obser-vation from "A" is that a high STU ratio typically indicates a higher supply of each commodity and, thus, lower prices. Vice versa, lower STUs are indicative of a higher crop price.

Plots "B" and "C" indicate that for the 2023 projections, a

much more sensitive to changes in soybean yield than corn yield. Soybean STU is more sensitive because of historically low projections for soybean ending stock levels. Additionally, a one-bushel change in soybean yield results in a much larger percentage of missed bushels due to soybeans producing fewer bushels per acre than corn.

2023 Corn and Soybean Projections

The current USDA projection for 2023 average corn yield is 181.5 bushels/acre, which results in a projected STU ratio of 13% and a price forecast of \$5.60/bushel. Over-estimation of vields by the USDA could indicate STU and prices closer to 2021 or 2022, depending on how many bushels the ac-tual average yield is under the projection. If actual yield exceeds USDA projections, the STU ratio would increase, likely causing prices to fall under \$5.60/bushel. Analysis of soybean yield tells a more exciting story. The USDA is projecting an average soybean yield of 52 bushels/acre, STU of 6.44%, and an average price of \$12.90/bushel for 2023. Suppose the aver-age soybean yield is just one bushel short, and harvested soybean acres projections are accurate. In this case, the STU ratio falls to 4.5%, which has not occurred since 2012, when the drought caused supply shortages and soybean prices of \$14.40/bushel. Further thinning of soybean yield could push soybean prices closer to 2012 levels. In conclusion, USDA Ag Outlook Forum projections indicate that the soybean STU ratio is more sensi-tive to over-projection of yield than corn. These results may show a possible upside to soybean prices if planted and harvested acres are correct, but the average yield is over-projected, or vice versa. USDA planted acre projections will become more accurate as spring planting progresses, giving additional insight into how yield misses could affect STU for corn and soybeans.



Source: By Dr. Grant Gardner Assistant Extension Professor, Agricultural Economics, University of Kentucky

Spring Seeding

Currently, no-till seeding is the best method to seed in your pasture when a spring seeding is planned.

NOTE: The next window to seed cool season forages is August 15 to September 15 depending on moisture conditions.

Consult with your county agent to select the appropriate forage types for your area and intended use (see the listing of all county agents at the end of the calendar).

See UK College of Agriculture, Food and Environment publication Establishing Horse Pastures (ID-147) for more information.

Mineral and Salt Supplementation

Put mineral and salt products in a suitable feeder that protects the minerals and salt from the elements.

Place feeder for easy access to your horse.

Check for consumption. Regular consumption should be 1 to 1½ ounces per adult horse per day.

The amount may vary depending on animals sweating.

Use only products designed for horse and read the label to know what you are providing.

Use loose product to promote greater intake than with block products.

Pasture Rotation

Divide pastures into smaller paddocks to

Equine April Tips & Tidbits

help reduce selective or spot grazing, resulting in more complete utilization of available forage.

Make sure the energizer for the temporary fence is working properly and your watering system is ready to go.

Graze one paddock at a time.

Move animals to the next paddock when forage is grazed down to 3 to 4 inches. Some areas will have more forage, but if the majority of the paddock is 3 to 4 inches in height move the horses.

Move horses back into the paddock once the forage is again 6 to 8 inches in height, which is normally after a 14 to 21 day rest period.

Rest periods can be longer depending on growing conditions.

Use a grazing stick to help evaluate the forage availability. Walk the pastures or paddock to see how the forage is being grazed.

See UK College of Agriculture, Food and Environment publication Using a Grazing Stick for Pasture Management (AGR-191) for more information.

Compost Unused Hay/Bedding

A typical horse weighing 1,000 pounds will produce approximately 50 pounds of

manure per day, and horses housed in stalls may generate an additional 20 pounds of soiled bedding per day.

Improper management of this waste has the potential to pollute Kentucky's surface and ground waters.

Composting, when done correctly, is a viable option as composting converts organic matter into a stable humus-like material.

Composting can be accomplished through many ways such as bins or windrows.

How to Compost:

Turn compost piles or windrows. Aerobic (with oxygen) decomposition is more efficient than anaerobic and is achieved through aeration.

Turn the pile 3 to 5 times every 2 to 3 days when the moisture content is between 40 and 70 percent.

Maintain temperatures between $135^{\circ}F$ and $160^{\circ}F$. A temperature of $150^{\circ}F$ is ideal for killing the eggs of parasites.

Apply stable compost to pastures, gardens, and around trees and shrubs as a mulch or soil amendment.

See UK College of Agriculture, Food and Environment publication Composting Horse Muck (ID-168) for more information.



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



BEEF QUALITY CARE & ASSURANCE (BQCA) TRAINING

CAIP Educational Component Eligible

Tuesday, April 25th 9:00 a.m. Bourbon County Extension Office, 603 Millersburg Rd., Paris

Call the Extension Office at 859-987-1895 to reserve a spot

Certification is free in the month of April.

USDA Announces Signup for Pandemic Assistance Revenue Program

The Pandemic Assistance Revenue Program (PARP) will assist eligible producers of agricultural commodities who experienced revenue decreases in calendar year 2020 compared to 2018 or 2019 due to the COVID-19 pandemic. PARP will help address gaps in previous pandemic assistance, which was targeted at price loss or lack of market access, rather than overall revenue losses.

USDA's Farm Service Agency will accept PARP applications from January 23 - June 2, 2023.

Eligible and Ineligible Commodities

For PARP, eligible agricultural commodities include crops, aquaculture, livestock, livestock byproducts, or other animals or animal byproducts that are produced as part of a farming operation and are intended to be commercially marketed. This includes only commodities produced in the United States or those produced outside the United States by a producer located in the United States and marketed inside the United States.

The following commodities *are not eligible* for PARP:

- Wild free-roaming animals
- Horses and other animals used or intended to be used for racing or wagering
- Aquatic species that do not meet the definition of aquaculture
- *Cannabis sativa L.* and any part of that plant that does not meet the de^Pinition of hemp
- Timber

Program Eligibility

PARP payments will be made on a whole-farm basis, not commodity-by-commodity. To be eligible for PARP, an agricultural producer must have been in the business of farming during at least part of the 2020 calendar year and must have experienced a 15 percent decrease in allowable gross revenue in 2020, as compared to either:

• The 2018 or 2019 **calendar year**, *as elected by the producer*, if they received allowable gross revenue during the 2018 or 2019 **calendar years**, or

• The producer's expected 2020 calendar year allowable gross revenue, if the producer had no allowable gross revenue in 2018 or 2019.

PARP payments will be issued after the application period ends on June 2, 2023.

For more information on determining allowable gross revenue visit the website, <u>www.farmers.gov/coronavirus/pandemic-assistance/parp</u> or review the PARP fact sheet. To apply for PARP, contact your local USDA Service Center.



Soil test bags and soil probes are available through the Bourbon County Extension Office.

Notice

Due to soil probes not being returned, the Bourbon County Extension Office now requires a **\$50.00 deposit** when checking out soil probes. If soil probes are not returned within two weeks from the check out date, your deposit will not be returned.

Forage Timely Tips: April

- Make sure hay equipment is ready for May harvests.
- 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.
- Determine need for supplemental warm season forages such as pearl millet or sudangrass.
- Flash graze pastures newly seeded with clovers to manage competition.

Plate It Up Kentucky Proud Recipe



Broccoli Brunch Casserole

Nonstick cooking spray 8 ounces ground turkey sausage 3 1/2 cups broccoli florets, chopped

1 1/2 cups shredded, part skim 1 teaspoon ground mozzarella cheese, divided 8 eggs 1 cup part skim ricotta cheese 1/4 cup skim milk

black pepper 1/2 teaspoon salt 1 Roma (Plum) tomato, thinly sliced

Preheat oven to 350 degrees F. Spray a 9-by-13-inch baking dish with nonstick cooking spray. Place a medium-sized skillet over medium heat. Sauté sausage until evenly brown, drain well, crumble, and cool slightly. In a medium bowl, mix cooked sausage, broccoli, and a ½-cup of mozzarella. In a separate bowl, whisk eggs until frothy and then combine with a ½-cup of mozzarella, ricotta cheese, milk, pepper, and salt. Spoon the sausage mixture into the prepared baking dish. Spread the egg mixture over the sausage mixture. Sprinkle with the remaining mozzarella,

and arrange the tomato slices on top. Cover with foil, and bake 30 minutes. Uncover, and bake for an additional 15 minutes. Let stand for 10 minutes before serving.

Yield: 8 slices

Nutritional Analysis:

260 calories, 16g total fat, 7g saturated fat, 0mg cholesterol, 550mg sodium, 7g total carbohydrate, 1g fiber, 1g total sugars, 0g added sugars, 20g protein, 6% DV vitamin D, 25% DV calcium, 10% DV iron, 6% DV potassium.