The September- October 2022 Edition of:

NIKKI'S NEWSLETTER

Marshall County's Agriculture and Natural Resources Update

University of Kentucky
College of Agriculture, Food and Environment

Cooperative Extension
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Happy fall ya'll! We have many opportunities headed your way. Check these out:

October 14th- Tornado Recovery Tree Giveaway (p.6)
October 12th- Blackberry Production Field Day (p.9)
October 27th- Christmas Tree Production Webinar (p. 8)
Mondays from Oct. 17th through Dec. 12th- Fall Beef Series (P.9)
Select Tuesdays this Fall- JR Master Gardener Series (p.7)

Also, Save the Date for :
Jan. 5th- UKREC Winter Wheat Meeting

....and don't forget about my monthly gardening series below & on p.5!

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Fall 2022 Wheat Planting Decision

Faye Kuosman, UK Extension Horticulture Agent

Corn harvest is now underway and Kentucky grain farmers will soon decide if and how much wheat they will plant this fall. Compared to last year there are significant increases in wheat and soybean prices, major increases in all fertilizer prices, and fuel prices that have almost doubled. The following analysis quantifies these relative changes to estimate the profitability for crops harvested in 2023. The analysis includes estimated returns comparing double-cropped wheat/soybeans with full-season soybeans for the 2023 crop, and the likely implications for Kentucky grain farmers.

Additional costs associated with double-cropping are accounted for, including fuel, fertilizer, herbicides, machinery repairs and depreciation, labor, hauling, etc. The analysis assumes a blended mix of selling directly from the field and selling from storage for both wheat and soybeans, as well as expected basis for each crop with those scenarios. This results in 2023 crop prices of $8.85/bu for wheat and $13.75/bu for soybeans.

Two regions with different agronomic characteristics are evaluated. The first region is along the southwest tier of counties roughly between I-24 and I-65, which traditionally does a lot of double-cropping. The second region is along the northwest tier of counties (Ohio Valley region) that has some of the best yields for corn and soybeans, but traditionally plants less wheat. Cash rent is assumed to be $175/acre for both these regions for the average ground and $225/acre on the best ground (note: this will vary substantially, but is done here for illustrative purposes only). Other major assumptions are: $4.50/gallon fuel, 50 mile one-way grain hauling, $.95/unit N, $.67/unit P, and $.72/unit K.

Southwest Tier Assumptions (Average Ground):
72 bu wheat
42 bu double-cropped soybeans
50 bu full-season soybeans

Resulting net profits:
+$279 double-crop
+$153 full-season soybeans

This results in a $126 difference in favor of the wheat-soybean double-crop. The double-crop soybean yield would need to decrease to 32 bushels before full-season soybeans were as profitable. This would equate to a 36% yield loss of double-cropped soybeans compared to full-season soybeans.

Southwest Tier Assumptions (Best Ground):
90 bu wheat
51 bu double-cropped soybeans
60 bu full-season soybeans

Resulting net profits:
+$502 double-crop
+$236 full-season soybeans

This results in a $266 difference in favor of the wheat-soybean double-crop. The double-cropped soybean yield could drop down to 31 bu before full-season soybeans were as profitable. This would equate to a 48% yield loss of double-cropped soybeans compared to full-season soybeans.

Northwest Tier Assumptions (Average Ground):
65 bu wheat
42 bu double-cropped soybeans
50 bu full-season soybeans

Resulting net profits:
+$220 double-crop
+$153 full-season soybeans

This results in a $67 difference in favor of the wheat-soybean double-crop. The double-cropped soybean yield would have to decrease to 37 bu in this case before full-season soybeans were as profitable. This would equate to a 26% yield loss of double-cropped soybeans compared to full-season soybeans.

Northwest Tier Assumptions (Best Ground):
75 bu wheat
51 bu double-cropped soybeans
60 bu full-season soybeans

Resulting net profits:
+$374 double-crop
+$236 full-season soybeans

This results in a $138 difference in favor of the wheat-soybean double-crop. The double-cropped soybean yield would have to decrease to 40 bu in this case before full-season soybeans were as profitable. This would equate to a 34% yield loss of double-cropped soybeans compared to full-season soybeans.

The Best Management of Fusarium Head Blight in Wheat Starts with Variety Resistance

Pictured: Symptoms of Fusarium head blight of wheat

Carl A. Bradley, Plant Pathology Specialist

The most consistent, problematic disease of wheat in Kentucky and the surrounding region is Fusarium head blight (FHB; also known as scab), caused by the fungus Fusarium graminearum (pictured). This disease can cause reduced grain yield, test weight, and quality. In addition, the fungus can produce toxins that will contaminate grain, such as deoxynivalenol (DON; also known as vomitoxin). Harvested grain with high levels of DON may be discounted or outright rejected at the elevator.

To achieve the best management of FHB, the most important step is to choose varieties that have resistance to this disease. Unfortunately, varieties with complete resistance (immunity) to FHB do not exist, but there are several varieties available with high levels of resistance.

In addition to the ratings available from seed companies, the University of Kentucky Small Grains Variety Testing Program and the UK Small Grains Breeding Program do provide ratings for diseases that occur in their trials. Those disease results are available in the most recent KY Small Grain Variety Performance Test Report and on the Fusarium Head Blight (Head Scab) – Variety Testing Research Page, which both can be accessed here. In addition, the University of Illinois Wheat Breeding Program also provides similar ratings from their annual tests under FHB pressure, which are available here. Seeking out this information and making good wheat variety decisions will go a long way towards managing this important disease.

Fall 2022 Wheat Planting Decision Continued

Given the current expected market conditions, planting wheat looks extremely attractive this fall in all four scenarios, and this is the first year that I have done this analysis that this has occurred. On the best ground in the southwest tier of counties, the wheat-soybean double-crop is projected to net $266/acre more than full-season soybeans. On the best ground in the northwest tier of counties, the wheat-soybean double-crop is projected to net $138/acre more than full-season soybeans.

This analysis doesn't account for potential payments from Farm Bill programs. However, these programs would pay on base acre crop allocation and not planted acres, so there would be no effect on the planting decision. This analysis does not also account for potentially harvesting straw, which is typically more common in Central Kentucky. To change the assumptions above to your specific conditions and evaluate your expected profitability, go to the grain budget site at: http://agecon.ca.uky.edu/budgets

September Grazing Tips

- **If not already done, soil sample and apply lime and fertilizer as needed.**
- **Plant Perennial grasses and legumes. Consider using a novel endophyte tall fescue**
- **Harvest hay as needed. Do NOT harvest alfalfa after mid- September.**
- **Closely monitor livestock and do NOT overgraze. Pasture plants accumulate energy reserves in the the fall that help to allow pastures to stockpile for winter grazing.**
- **Rest native warm-season grass fields until after frost for better winter survival.**

Ryegrass Control Should Start in the Fall

Dr. Travis Legleiter, Weed Specialist

Italian ryegrass escapes prior to corn and soybean planting in the spring have been on the rise over the past several years. During the 2022 spring season we received significantly more calls and reports about ryegrass escaping spring burndowns than in previous years. A number of factors likely contributed to this increase in 2022 including increased ryegrass pressure across the state, herbicide shortages, and poor applications conditions in the spring of 2022. While we certainly cannot predict the upcoming spring weather and can only estimate herbicide shortage affects, the one known factor is that ryegrass will continue to be present on Kentucky corn and soybean fields prior to planting. For those farmers who have been dealing with ryegrass and have known problematic fields it may be pertinent to start planning for ryegrass control with a fall residual herbicide application. Italian ryegrass is a winter annual that emerges in the fall and then matures and produces seed in the spring/ early summer of the following year. Ryegrass has traditionally been a problematic weed primarily in wheat because of their similar lifecycle, but it is becoming more problematic in corn and soybean especially with trends pushing to earlier planting dates in the spring. The lifecycle of ryegrass though, may be an area that can be exploited on corn and soybean acres with the use of residual herbicides to control ryegrass as it emerges in the fall. There are several herbicides containing group 15 that are labeled for fall applications to control winter annual weeds such as Italian ryegrass. There has also recently been a 24(c) label approved in Kentucky specifically for control of glyphosate resistant ryegrass.

The products that are either labeled for fall applications for control of fall emerging weeds, winter annuals, or fall applications specifically for glyphosate-resistant ryegrass control are listed in Table 1 (on following page) along with the label details for each product. All products listed can be applied in the fall prior to corn or soybean planting.

When planning a fall application of a residual herbicide for control of emerging ryegrass, keep the following in mind.

- Applications should occur following crop harvest and should ideally be prior to ryegrass emergence.
- If ryegrass emergence has occurred at the time of application, an effective foliar herbicide will be need- ed to kill emerged ryegrass. Many labels suggest the use of Gramoxone (paraquat) for glyphosate- resistant ryegrass populations, although most Kentucky populations remain glyphosate susceptible and a rate of 1.25 to 1.5 lb ae glyphosate per acre will control small glyphosate-susceptible ryegrass.
- One of the labeled herbicides contains metribuzin which can assist in controlling emerged ryegrass, alt- hough metribuzin alone should not be relied on for foliar control. Ideally, products containing metribuzin should be sprayed with paraquat to control ryegrass as the two actives are synergistic, whereas glyphosate and metribuzin can be antagonistic on ryegrass control.

Lastly, while a residual herbicide applied in the fall can help with ryegrass control, it should not be expected to completely control the ryegrass population in each field. Some ryegrass plants may emerge after the residual herbicide has degraded or may even emerge in the spring. Also, similar to all residual herbicide applications, rainfall is needed to fully activate the herbicide and in the absence of rainfall ryegrass control will be minimal.

Even under the best of conditions, one should not expect a fall residual herbicide to completely control ryegrass and should plan accordingly for a spring burndown application. The use of a residual herbicide should be considered as a component of a larger ryegrass management program that reduces the number of plants needing to be controlled in the spring prior to corn and soybean planting. Additionally, the use of a fall residual lowers the potential of continuing to select for herbicide-resistance with the addition of sites of action in the fall application.

Table 1. Herbicide labeled for fall applications for controlling weeds germinating in the fall/winter annual weeds or fall applications for control of glyphosate-resistant ryegrass prior to corn and/or soybean planting the following spring.

Trade Name Product	Active Ingredients (Site of Action Group #)	Labeled Application Timing	Fall application Rate (Medium Soils)[ab]	Replant Restrictions	Label Restrictions specific to fall applications
Anthem Maxx	Pyroxasulfone (15) + fluthiacet-methyl (14)	Fall applications for controlling weeds germinating in the fall or winter annuals	Corn – 4 to 5 fl oz/a Soybean – 3.5 to 4.5 fl oz/a	Corn & Soybean – 0 Months	- Do Not exceed 2-inch incorporation if tilled after application - Do Not Apply to frozen or snow-covered soil - Do Not make fall applications on coarse soils
Boundary	S-metolachlor (15) + metribuzin (5)	Control of glyphosate-resistant Italian ryegrass in the fall prior to soybean or corn planting the following spring (*24c Special Needs Label*)	Corn & Soybean – 1.8 to 2 pt/a	Corn – 4 Months Soybean – 0 Months	- Apply September 1 to November 30 - Do Not apply Boundary to Frozen Ground - Tillage may occur following application but may not exceed 2 to 3 inches - Do Not Make more than one fall application of Boundary
Dual II Magnum[c]	S-metolachlor (15)	Fall application for residual control of glyphosate resistant Italian ryegrass in corn and soybean -	Corn & Soybean – 1.33 to 1.67 pt/a	Corn & Soybean – 0 Months	- Apply from September 1 to December 1 after harvest and prior to ryegrass emergence - Tillage may occur following application but may not exceed 2 to 3 inches
Zidua SC	Pyroxasulfone (15)	Fall/Winter application for controlling weeds germinating in the fall, or winter annual weeds	Corn & Soybean – 3.25 to 5 fl oz/a	Corn & Soybean – 0 Months	- Do Not apply to frozen or snow-covered soil - If tillage is used following application tillage may not exceed 2 inches.

[a] Check the herbicide label for product rates to use on fine and coarse soils
[b] Refer to label for maximum seasonal/yearly rate allowance for each active ingredient.
[c] Numerous generic formulations of S-metolachlor and metolachlor exist on the market. Check product label to assure fall applications for control of ryegrass are labeled for each specific product prior to use.

The Marshall Master Gardener Association Invites you to a

Tree Giveaway for Tornado Recovery

October 14th
3:30-6:30PM
(or while supplies last)

Marshall County Extension Office
1933 Mayfield Highway
Benton KY, 42025

Residents of Marshall County affected by the recent tornado can pick up FREE TREES! Trees will be planted in 1 gallon pots and are 3-7 feet tall. There could be as many as 26 different species to choose from, many of which are natives! The number of trees available per household is yet to be determined. Master Gardeners will be on site to offer planting instructions & tips.

University of Kentucky
College of Agriculture, Food and Environment

THANK YOU!

Trees Grown and Provided by
Highlandbrook Nursery
1720 Allensville Rd, Elkton, KY 42220

811 Know what's below. Call before you dig.

Marshall County Junior Master Gardeners

Every Other Monday @ the
Benton Library
Meeting Room B
5:30-7:00pm
Ages 9-18

Fall Schedule:
Sept. 12th, Sept. 26th,
Oct. 10th , Oct. 24th,
Nov. 7th, & Nov. 21st

For More Information Contact:
Marshall County
Extension Office
1933 Mayfield Highway
Benton, KY 42025
270-527-3285
https://marshall.ca.uky.edu

Christmas Trees 101 WEBINAR

THURSDAY
OCT. 27, 2022

9 AM - 1 PM EASTERN
8 AM - 12 PM CENTRAL

Scan the code with your phone to register!

University of Kentucky
College of Agriculture, Food and Environment

Kentucky Horticulture Council

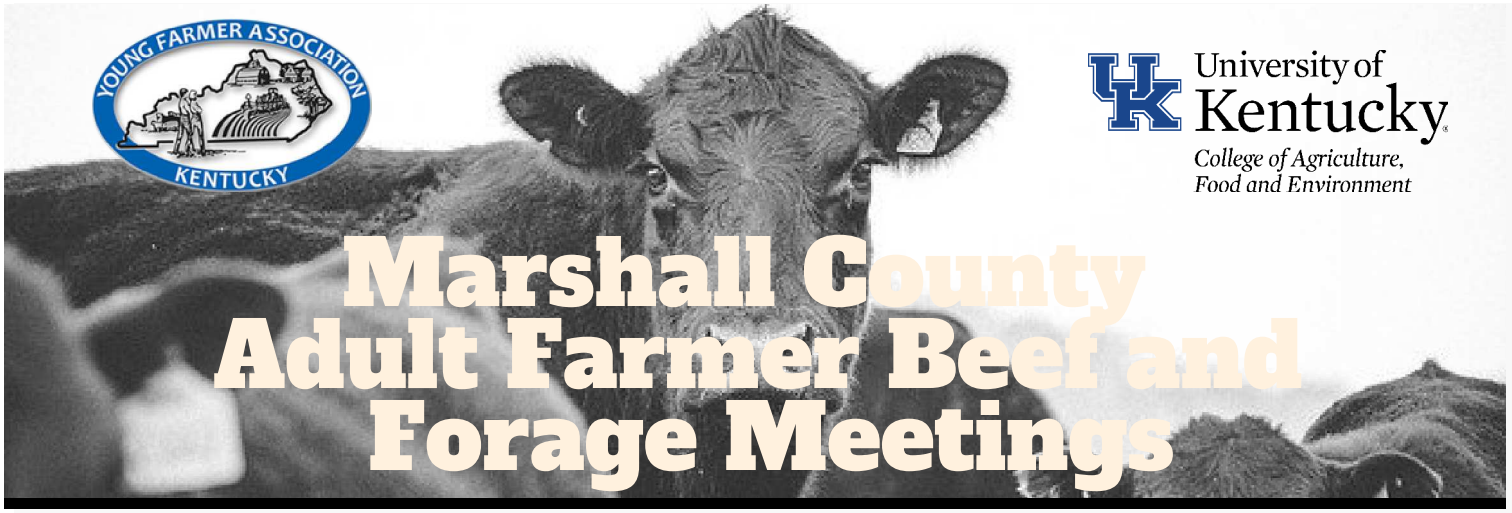
KADF
KENTUCKY AGRICULTURAL DEVELOPMENT FUND

INTERESTED IN LEARNING MORE ABOUT CHRISTMAS TREE PRODUCTION IN KENTUCKY?

Join us for a discussion on site selection, planting, fertility management, pruning and marketing your crop

Register now:

https://KYChristmasTrees101.eventbrite.com



Marshall County Adult Farmer Beef and Forage Meetings

University of Kentucky
College of Agriculture, Food and Environment

Young Farmer Educator, Jeff Futrell, has teamed up with Extension Agent, Nikki Rhein, to offer another beef series at the Extension Office. We hope you will join us!

Every Monday Night (except 10/31)
Oct. 17th- Dec. 12th
7:00pm
Marshall Co. Extension Office
1933 Mayfield Hwy.
Benton, KY 42025

Topics will likely include: Mineral feeding, Stretching your Fertilizer $, Beef Production Systems, Marketing, Legislative Issues, Insects & Diseases, and Budgets!

BLACKBERRY PRODUCTION FIELD DAY

Wednesday, October 12, 2022
10:00 am - 3:30 pm Central
Registration begins at 9:00 am

University of Kentucky
College of Agriculture, Food and Environment

Garrett Farms
3800 Hardmoney Road,
Paducah, KY

Kentucky Horticulture Council

Air Fried Okra Tots with Tangy Dipping Sauce

Ingredients:
12 ounces okra stalks
2 tablespoons olive oil
2 tbls salt-free seasoning
Tangy Dipping Sauce:
1 cup plain low-fat yogurt
3 tablespoons mayonnaise
1 tablespoon dried parsley
2 teaspoons dried dill
1 teaspoon garlic powder
1 teaspoon onion powder
1/2 teaspoon salt

Directions: Cut the ends off the okra. Cut the okra into 2-inch (tater tot sized) chunks. In a large bowl, place the cut okra, olive oil, and seasoning. Toss to coat. Add to the basket of your air fryer in a single layer. Depending on the size of your air fryer, you may need to cook in batches so the okra is in a single layer, which allows air to circulate and okra to be crispy. Cook at 350 degrees F for 10 minutes or until crispy, tossing halfway through. While the okra cooks, prepare the sauce by mixing all of the ingredients in a small bowl. Refrigerate the sauce until ready to serve. Serve okra tots with tangy dipping sauce. Store leftovers in the refrigerator within two hours. Yields: 5 servings

Nutritional Analysis:
Dipping Sauce: 170 calories, 13g total fat, 2.5g saturated fat, 10mg cholesterol, 330mg sodium, 14g total carbohydrate, 2g fiber, 4g total sugars, 0g added sugars, 4g protein, 0% DV, vitamin D, 10% DV calcium, 6% DV iron, 8% DV potassium
Nutrition Analysis for Okra Tots (no sauce): 70 calories, 6g total fat, 1g saturated fat, 0mg cholesterol, 0mg sodium, 10g total carbohydrate, 2g fiber, 1g total sugars, 0g added sugars, 1g protein, 0% DV vitamin D, 4% DV calcium, 0% DV iron, & 6% DV potassium

Kentucky Okra

SEASON: June through September

NUTRITION FACTS: Okra is a good source of Vitamin C, folic acid, and fiber. Fiber helps lower cholesterol which reduces the risk of heart disease.

SELECTION: Select small, crisp, tender pods, 2 to 4 inches long. Pods should be free from blemishes. Pods that have passed their prime will have a dull, dry appearance, contain coarse fibers, and are stringy when opened.

STORAGE: Refrigerate unwashed, dry okra pods in the vegetable crisper, loosely wrapped in perforated plastic bags. Okra will only keep 2 to 3 days before it starts to deteriorate.

PREPARATION:
Wash okra pods before cooking. Cut off stem end, leaving small pods whole. Cut large pods in 1/2-inch slices.

Okra exudes a unique juice that will thicken soups and stews. The taste complements tomatoes, onions, corn, and fish stock.

FREEZING:
The best method for long-term storage is freezing. Okra must be blanched before freezing to hold the flavor and quality. It will keep in the freezer for one year.

Kentucky Proud Project

County Extension Agents
for Family and Consumer Sciences

University of Kentucky, Dietetics
and Human Nutrition students

Source: FruitsAndVeggies.org

July 2022

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

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Cooperative Extension Service

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