



Fall 2022

Cooperative Extension Service
Daviess County
4800A New Hartford Road
Owensboro, KY 42303
270-685-8480
www.daviess.ca.uky.edu

A Message from Clint

As new carbon programs continue to become available to row crop farmers across the country, understanding the driving force behind why these programs exist in the first place is key to determining their longevity. Dr. Jordan Shockley, Extension Farm Management Specialist, seeks to explain the answer to the question of why in the following discussion.

The foundation for the existence of carbon programs globally is The Paris Agreement. The Paris Agreement is a legally binding international treaty on climate change adopted by over 200 countries. The goal of the agreement is to limit global warming to below two degrees Celsius compared to pre-industrial levels. Since each country's emissions of greenhouse gases differ (e.g., the U.S. contributes 15% of global carbon dioxide emissions, while Japan contributes 4%), each country sets emission-reduction targets, known as National Determined Contributions (NDCs).

Two types of carbon markets have developed across the globe to meet the goals of The Paris Agreement by reducing greenhouse gas emissions, compliance markets, and voluntary markets. Compliance markets are governmentally imposed limits on greenhouse gas emissions at the federal or state level. Globally, most carbon markets are compliance-based markets. However, carbon programs in the U.S. are driven mostly by voluntary markets. These markets are driven by companies voluntarily committing to reduce their greenhouse gas emissions. Many have seen popular press articles where a company has pledged to be net-zero in greenhouse gas emissions by a specific date in the future. So why are companies voluntarily making these pledges, which inherently will cost money? Some of these companies are driven by their mission and business goals, where environmental stewardship plays an important role. Other companies are driven by consumers and investors that demand environmental

accountability. Field to Market reports that more than eight in ten Americans consider sustainability when buying food and nearly $\frac{3}{4}$ of consumers want companies to do a better job explaining how their purchases impact the planet.

Given the demand for environmental stewardship, companies are voluntarily pledging to reduce their emissions by a specific time in the future. While some companies may reach this goal internally by improving operating efficiencies and converting to green energy, many companies need to purchase

carbon credits from other sources to offset their emissions. Creating carbon credits is where agriculture plays a role, specifically row crop producers. According to the U.S. Environmental Protection Agency, 55% of U.S. greenhouse gas emissions from agricultural activities are from ag soil management practices. In short, this is from common tillage practices. Row crop producers can sequester carbon in the soil and generate carbon credits by adopting

management practices like cover crops and switching from conventional tillage to no-till or other conservation tillage practices. However, the concept of additionality is important. Additionality means that a farmer must adopt a different and new management practice that sequesters additional carbon compared to their "baseline" or current practice. Therefore, if you have adopted no-till or cover crops as a common management practice, you are not eligible to enroll in most carbon programs offered today.

If you qualify and enroll in a carbon program, the carbon credits generated by the adoption of no-till or cover crops are purchased from the producer by a third-party aggregator with which you signed an agreement to enroll your acres in their carbon program. Those credits are verified and then sold to companies that need to offset their emissions to meet greenhouse gas pledges. Therefore, as of today, the carbon programs we see offered in agriculture are based on voluntary markets driven by corporate promises. If interested in carbon programs in your area, you must ask questions, read the fine print, and seek legal advice before enrolling.





CENSUS OF AGRICULTURE COMING

Kentucky's farmers will soon have the opportunity to be represented in the nation's only comprehensive and impartial agriculture data for every state and county. The U.S. Department of Agriculture (USDA) will mail the 2022 Census of Agriculture to 125,000 Kentucky ag producers. The 2022 Census of Agriculture will be mailed in phases, starting with an invitation to respond online in November. Farm operations of all sizes, urban and rural, which produced and sold, or normally would have sold, \$1,000 or more of agricultural product in 2022 are included in the ag census. Collected in service to American agriculture since 1840, the Census of Agriculture tells the story and shows the value of Kentucky's agriculture. It highlights land use and ownership, producer characteristics, production practices, income and expenditures, among other topics. For more information visit www.nass.usda.gov/AgCensus.

MONEY INCENTIVE TO SELL CPH-60

The Green River Area CPH-60 feeder calf sale is December 1. Producer information and documentation has been mailed and is available on my website at <http://daviess.ca.uky.edu/ANR>. Participating farms acknowledge the CPH advantage in net profit gain over the traditional wean and sell marketing program, and return with cattle each year. For first time participants an opportunity has been provided by the Kentucky Agricultural Development board to participate in the PVAP-Precondition program. Post Weaning Value Added Program (PVAP)

PVAP is for producers who have never weaned and sold calves in a preconditioned sale. We will visit with the producer and develop a feeding and management plan based on selling December 1. The calves must be weighed at weaning (group weights over truck scales are acceptable), feed and health costs recorded. Upon sale of the calves, a closeout of returns to the preconditioning phase will be calculated and the producer will receive a \$50/head incentive payment, up to \$1000 maximum.

The market is paying a premium for weaned calves and backgrounding budgets still look favorable at this time. Please feel free to contact Kevin Laurent Extension Beef Specialist if you have any questions at (270) 625-0994. The PVAP enrollment form is available on my website.

ATRAZINE REVIEW BY EPA

On June 30th, The U.S. Environmental Protection Agency (EPA) announced that they are revising the registration for atrazine, a well-studied herbicide essential to farming. The recommendations include lowering the acceptable levels of atrazine in water sources from 15 to 3.4 ppb in reaction to a lawsuit that ensued after the most recent atrazine label revision. The new level of concern will vastly reduce the herbicide's effectiveness, hindering farmers' ability to utilize this critical tool.

There is an important opportunity to submit comments telling the EPA how atrazine is a vital component of corn weed control and how the potential adoption of a proposed level of concern far below the current level would significantly impair the effective weed control on your farm. This is a public comment period, ending on Friday, October 7th. <https://ncga.com/take-action/become-an-advocate/take-action>

PRINCETON UPDATE

To help restore the UK Research and Education Center at Princeton click: <https://bit.ly/3oTV95D>

These funds go directly toward rebuilding costs not covered by insurance.

Thank you for your support!

KADF UPDATE

The Daviess County Agricultural Development Council appropriated a portion of the 2022 agriculture development fund to the Green River Area Beef Improvement Group to administer the County Agricultural Investment program. Applications are available by calling the Extension office to make the request. Applications are mailed from the Green River Area Beef Improvement Group. Projects must be complete and an application and supporting documentation postmarked on or before November 30. Call the extension office for more information. The funding categories and items eligible for reimbursement can be found online at <https://www.kyagr.com/agpolicy/2022-Program-Guidelines-and->



AGRICULTURAL LENDERS CONFERENCE

The Annual Agricultural Lenders Conference, hosted by the Ohio Valley Farm Business Analysis Association is planned for 9:00 pm to noon on December 14 at the Daviess County Cooperative Extension Office. This program is open to all individuals or businesses involved in extending agricultural production credit, farm loans, and crop insurance to farmers and landowners in the Green River area. Credit Analysts, grain marketers, and farm business income tax preparers are also welcome. Always well attended, this program provides participants with a big picture view of the world macro-economic situation including updates from South American agricultural production and challenges which directly influence the United States, and updates on the grain, cattle, tobacco, and poultry economic outlook for the upcoming year. The purpose is to help businesses become better prepared to serve their farming clients for the upcoming season.

WEEKLY FARM UPDATE

Don't want to miss the weekly farm update but don't receive the Messenger-Inquirer? Sign up to receive it by e-mail using this link <http://eepurl.com/g6bZjz> or scanning the QR code from your smart device. You can also sign up to receive e-mails related to all of our program areas.



UP YOUR GRAZING GAME!

KENTUCKY GRAZING CONFERENCE

Profitable grazing systems from the soil up. Featuring Jim Gerrish and Ray Archuleta, nationally known experts in regenerative grazing.

Oct. 26, UK Extension Office - Leitchfield
Oct. 27, UK Extension Office - Winchester

For more information and tickets visit: <https://forages.ca.uky.edu/event/kentucky-grazing-conference-0> or call 859-257-0597



Jim Gerrish is an internationally known grazing lands educator, consultant, and writer providing service to farmers and ranchers for more than two decades. Before becoming a private consultant, Jim was director of the Forage Systems Research Center in Missouri where he co-founded the much-copied grazing school management workshop. Jim has over 22 years of beef-forage systems research and outreach, has written a regular monthly column in The Stockman Grass-Farmer magazine for over 20 years, has authored three books on grazing and ranch management. Jim is also a graduate of the University of Kentucky.

Ray Archuleta is a Certified Professional Soil Scientist with the Soil Science Society of America and has over 30 years experience as a Soil Conservationist, Water Quality Specialist, and Conservation Agronomist with the Natural Resources Conservation Service (NRCS). Ray received his AS degree in Livestock Science from Northern New Mexico College and a BS degree in Agricultural Biology. Ray founded Understanding Ag, LLC, and Soil Health Academy, to teach how to improve soil function on a national scale. Ray also owns and operates a 150-acre farm near Seymour, Missouri that he operates along with his wife and family.



Co-Sponsored by UK
 College of Agriculture and the
 Kentucky Forage and
 Grassland Council

UPCOMING MEETINGS

- January 5, 2023: UK Winter Wheat Meeting
- January 25, 2023: Ag Expo
- May 9, 2023: UK Wheat Field Day
- July 25, 2023: UK Corn, Soybean, and Wheat Field Day

WELCOME RACHEL

Rachel Logue is our new horticulture program assistant. She is originally from central Kentucky and attended Murray State University where she got her Bachelors in Horticulture. She started her extension career as an intern and moved into a temporary assistant position before joining us at the Daviess County Office. She enjoys reading and gardening in her spare time and is excited to dive into her new role!



CROP INSURANCE INCOME DEFERRAL

By: Suzy Martin

The IRS has an exception to the rule that cash method farmers must report income in the year received. This exception states that if a farmer has received crop insurance proceeds because of a natural disaster such as drought or flood then the reporting of that income can be postponed for one year. The exception is strictly for yield loss due to weather. Any proceeds received based on revenue do not qualify. To qualify for the exception the taxpayer must show that, under their normal business practice, the income from the crop for which the insurance payment was received would have been in the following year. For example, a taxpayer receives crop insurance proceeds for 2022 soybeans in November of 2022 however they usually sell their crop in the following year (2023). The taxpayer has the option to either report those crop insurance proceeds as 2022 income, or they can elect to defer that taxable income to 2023. The election to postpone reporting the payment covers all crops from a farm. That means that if you were to receive crop insurance proceeds for both corn and beans you cannot make the election for just one crop versus the other. The election to defer the proceeds is for all crop insurance proceeds for the tax year.

The tax preparer will need the following information (itemized by crop) to make the election:

- Crop destroyed or damaged
- Cause of damage
- Date of Destruction
- Payment Received
- Date of Payment
- Insurance Carrier

FALL CATTLEMEN'S MEETING

A meeting of the Daviess County Cattlemen's Association will be held **Tuesday, November 1 at 6:00 p.m.** at the Daviess County Cooperative Extension office. The meeting is open to all: members and non-members. This is the first meeting held since COVID so please mark your calendar and plan to attend. On the agenda for the evening is the election of officers for the upcoming year and recognition of the 4H/FFA feeder calf project participants and award recipients.

The special guest for the evening is Extension Beef Nutrition Specialist Dr. Katie Vanvalin. She will be speaking on things to consider when developing a ration to finish cattle for direct-to-consumer sales.

Beef Bash 2022

Recovering and Rebuilding from a natural disaster

Date: Thursday October 20th, 2022

Time: Registration 8:30 AM CT
Program starts at 9 AM CT

Location: The beef unit at the University of Kentucky Research and Education Center.

348 University Dr
Princeton, KY 42445
*Signs will be posted to the beef unit

MAKE PLANS TO JOIN US!

Commercial exhibitors

Educational exhibits and demonstrations

University of Kentucky, College of Agriculture Food & Environment personnel and administrators

No cost to attend
Lunch available to purchase

University of Kentucky
Beef Extension

Ryegrass Control Should Start in the Fall

Travis Legleiter

Assistant Extension Professor - Weed Science
Plant and Soil Sciences
University of Kentucky Research and Education Center

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 application conditions in the spring of 2022. While we certainly cannot predict the upcoming spring weather and can only estimate herbicide shortage effects, 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 its 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 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 herbicides 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 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 needed 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, although 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, like 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

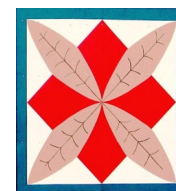
^b Refer to label for maximum seasonal/yearly rate allowance for each active ingredient.

^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.



Annual ryegrass survivor after 32 oz glyphosate spring 2022



Clint Hardy
Davies County Extension Agent
for Agriculture and Natural Resources Education

