AGRICULTURE & NATURAL RESOURCES

NEWSLETTER APRIL 2024



LaRue County
P.O. Box 210, 807 Old Elizabethtown Rd.
Hodgenville, KY 42748-0210
(270) 358-3401
larue.ca.uky.edu



AGENT REMARKS

April is the month of spring that releases spring fever in full blast. This year trees and flowers are blooming, grass is growing, and temps are on the rise. That goes without saying that planting season is upon us. Soon we will be seeing tractors and planters in the fields and on the roads, so be safe and share the road. The weather can be very unpredictable, so it is imperative to stay weather aware this month. However, this could possibly be one of the busiest months of spring spreading fertilizer, applying herbicides, and planting crops. This month is also busy for us here at the extension service stay up to date with happenings and for farm visits or recommendations reach out to the Extension Service at (270) 358-3401.



Adam Thomas

LaRue County Extension Agent for Agriculture & Natural Resources Education

CALENDAR OF EVENTS

- April 4th- KATS Planter Clinic- University of Kentucky Research and Education Center- Princeton
- April 9th LC Cattlemen's Meeting at 7 pm EDT
- April 11th Private Pesticide Applicator Certification (Noon – 3pm EDT) and (5:30 –8:30 pm EDT)
- April 12th Raised with Respect BQCA Training Hardin County Extension -1:30pm EDT
- April 16th University of Kentucky AI and Pregnancy Diagnosis School - Versailles KY Beef Unit
- April 18th Produce Best Practices Training -LC Extension Service 6pm EDT
- April 23rd Private Pesticide Applicator Certification (9am-Noon EDT) and (5:30-8:30 pm EDT)
- April 23rd Beginning Farmer Rancher Development Program Workshop, Eden Shale Farm
- April 25th Plant Propagation Workshop, LC Public Library 5pm EDT

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 belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, physical or mental disability or reprisal or retaliation 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.





SOIL TESTING

Soil testing is a soilmanagement tool we use to determine the fertility of soil as well as the optimum lime and fertilizer



requirements for crops. Fall is the best time of year to test your soil, but spring is also acceptable. Most nutrients take some time to break down and become available to the plant. If you give them all winter to break down, by the time you are ready to plant in the spring, the plants can better take up the nutrients.

When taking a soil sample, remember plants have shallow roots that lie within the top 6 to12 inches of soil. Use a soil test probe to pull a core at a depth of about 6 to 8 inches and collect approximately two cups of soil per sample. Put the sample in a plastic bucket since a metal bucket may taint the results. When you bring the sample to the county extension office, we will put it into a soil test bag along with some information you provide and soon you will your test results. It will save you some money and it is good for the environment.

Remember the LaRue County Extension Service offers this service *free* of charge to the residents of LaRue County.

LC CATTLEMEN'S MEETING

The LaRue County Cattlemen's will meet on *Tuesday, April 9th* at 7pm at the LaRue County Extension Service.

This meeting will be eligible for CAIP educational credit.

Speaker: Adam Thomas, LC Extension ANR Agent Topic: Pasture 101

A meal will be provided and they do ask that you bring a dessert to share.

ANNUAL CLEAN UP DAY



FORAGE TIMELY TIPS: APRIL

- → Make sure hay equipment is ready for high quality 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, 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.

PRIVATE PESTICIDE APPLICATOR CERTIFICATION



The Martin-Gatton College of Agriculture, Food and Environment is an Equal Opportunity Organization with respect to education and employment and authorization to provide research, education information and other services only to individuals and institutions that function without regard to 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, physical or mental disability or reprisal or retaliation 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.

Inquiries regarding compliance with Title VI and Title VII of the Civil Rights Act of 1964, Title IX of the Educational Amendments, Section 504 of the Rehabilitation Act and other related matter should be directed to

Equal Opportunity Office, Martin-Gatton College of Agriculture, Food and Environment, University of Kentucky, Room S-105, Agriculture Science Building, North Lexington, Kentucky 40546,the UK Office of Institutional Equity and Equal Opportunity, 13 Main Building, University of Kentucky, Lexington, KY 40506-0032 or US Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410.

CSA DIRECT MARKETING SUMMIT



A Community Supported Agriculture marketing event!

Hosted by the Kentucky Horticulture Council and the Center for Crop Diversification, the fourth annual Agriculture Direct Marketing Summit is scheduled for *April 8-10* — focusing on Community Supported Agriculture (CSA) marketing.

Extension agents, professionals and specialists, along with the community, are invited to join this free virtual event to hear from fellow producers, educators and professionals on how to price your CSA, understanding your customers, trends and more.

Event speakers from the UK Martin-Gatton College of Agriculture, Food and Environment include:

- Jairus Rossi, assistant professor, Department of Agricultural Economics
- Tim Woods, extension professor, Department of Agricultural Economics
- Kristi Durbin, manager, UK CSA
 Center for Crop Diversification

Available times include:

- April 8, 6:00 p.m.
- April 9, 6:00 p.m.
- April 10, 6:00 p.m.

PRODUCE BEST PRACTICES TRAINING





Call to register
270-358-3401

Pre-registration is required

LaRue County Extension Service 807 Old Elizabethtown Road Hodgenville, KY 42748

Cooperative Extension Service

Agriculture and Natural Resources Family and Consumer Sciences 4-H Youth Development MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT
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FENCING SCHOOL-

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!!!

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:_____

Street:_____

 City:______ State:_____ Zip code: _____

 Email:_____ Cell Phone: _____

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

Make CHECKS payable to: KFGC



COOPERATIVE EXTENSION



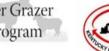


Kentucky Master Grazer Educational Program

Space is

LIMITED...

Register today!!!





2024 Kentucky Beginning Grazing School

Helping livestock producers improve profitability with classroom and hands-on learning

When: April 30-May 1, 2024

Where: Central Presbyterian Church

206 West Main Street, Princeton, KY 42445

\$60/Participant – includes all materials, grazing manual, Cost:

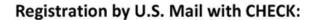
grazing stick, fencing kit, morning refreshments, and

lunch both days

Program Registration: <u>DEADLINE</u> is April 23, 2024

Online Registration with CREDIT CARD AT:

https://Spring2024GrazingSchool.eventbrite.com



Caroline Roper

UK Research and Education Center 348 University Drive, Princeton, KY 42445 Registration limited to 35 participants!!!

Name:	
Cell Phone:	

Number of participants _____ x \$60 per participant = ____ Total Amount

Call for student rates.

Please make checks payable to KFGC







Kentucky Master Grazer **Educational Program**













RAISED WITH RESPECT



HARDIN COUNTY EXTENSION OFFICE, ELIZABETHTOWN

111 OPPORTUNITY WAY ELIZABETHTOWN, KY



1:30 pm	Registration begins
2:00 - 2:30 pm	Opening comments from Certified Angus Beef
2:30 - 3:00 pm	Ensuring Beef Demand - Perspective from the Consumer and Chef Panel, moderated by Kirsten Nickles (Certified Angus Beef): Carey Brown (Kentucky Beef Council), Chef Josh Moore (Volare Italian Ristorante) and Chef Zach Wolf (Steak and Bourbon)
3:15 - 4:00 pm	BQCA Chute Side Training & Cattle Handling Kevin Laurent, University of Kentucky & Ben Lloyd Kentucky Beef Network
4:05 - 4:50 pm	Management Practices for Cattle Care - Dr. Darrh Bullock & Dr. Katie VanValin, University of Kentucky
4:55 - 5:40 pm	Preparing for Spring: Vaccination Protocol Design- Dr. Michelle Arnold University of Kentucky
6:00 - 6:30 pm	BQCA Basics & Exam: Kevin Laurent, University of Kentucky
6:30 - 7:00 pm	Dinner prepared by Chef Josh Moore-Volare Italian Ristorante, and Chef Zach Wolf-Steak and Bourbon
7:00 - 7:45 pm	Market Update from Paul Dykstra- Certified Angus Beef

REGISTER BY SCANNING THE QR CODE ABOVE OR CALL 859-278

A BQA WORKSHOP BROUGHT TO YOU BY:







E Q U I P M E N T R E N T A L

It's the time of year to think about pasture and hay improvements. The LaRue County Conservation District has cost share equipment to rent producers who otherwise don't own the necessary equipment.

That includes no-till drills, boomless pasture sprayer, lime spreader, and hay wrappers. Contact the LaRue Conservation District at (270) 358-3132 for costs and availability.

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PLANTER CLINIC



April 4, 2024
8 am-2 pm



PLANTER CLINIC

Hands-on training covering basic to advanced planter function to maximize planter performance.

University of Kentucky Research and Education Center 1205 Hopkinsville St. Princeton, KY 42445

- Identification of improper planter settings and the resulting consequences on plant performance.
- Discussion of planter components and proper maintenance.



Pre-registration is required at https://KATSPlanterclinic2024.eventbrite.com \$105

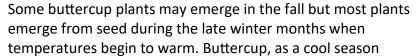
Credits pending





CONTROL EFFORTS FOR BUTTERCUP

Buttercups mostly grow as winter annuals, although some species are classified as short-lived perennials. In Kentucky there are different species of buttercups that are known to impact pasture fields, such as hispid buttercup (Ranunculus hispidus), tall buttercup (Ranunculus acris), creeping buttercup (Ranunculus repens), bulbous buttercup (Ranunculus bulbosus), and small flower buttercup (Ranunculus arbortivus). These plants typically produce five, shiny yellow petals beginning in the early spring. Although different species may have somewhat similar flower heads, each of these buttercup species differs somewhat in their vegetative leaf characteristics. During the time petals are showy new seed has already begun to develop. Waiting until after flowers appear can be too late to implement control tactics. This is one reason buttercups survive year to year and new plants emerge each year. The photo above shows hispid buttercup with mature flowers and new seed forming.





weed, often flourishes in over grazed pasture fields with poor stands of desirable forages. Therefore, pasture management practices that improve and promote growth of desirable plants during these months is one of the best methods to help compete against the emergence and growth of this plant. Whereas, livestock animals allowed to overgraze fields during the fall and winter months is one of the main factors that contribute to buttercup problems. Mowing fields or clipping plants close to the ground in the early spring before buttercup plants can produce flowers may help reduce the amount of new seed produced, but mowing alone will not totally eliminate seed production. The photo above shows hispid buttercup with mature flowers and new seed forming.

For chemical control, herbicides registered for use on grazed grass pastures that contain 2,4-D alone will effectively control buttercup. Depending on other weeds present herbicide products that contain dicamba+2,4-D (eg. Weedmaster, Brash, Rifle-D, etc.), aminopyralid (eg. GrazonNext, Duracor), or triclopyr (eg. Crossbow) can also be used. However, legumes such as clovers interseeded with grass pastures will be severely injured or killed by these other herbicide products. For optimum results apply a herbicide in the early spring (March or early April) before flowers are observed, when buttercup plants are still small and actively growing in a vegetative growth stage. For best herbicide activity wait until daytime air temperatures is greater than 60 F for two to three consecutive days. Consult the herbicide label for further information on grazing restrictions, precautions, or other possible limitations.

For fields heavily infested with buttercup a variety of control tactics may be needed. Apply a herbicide to help reduce the population of buttercup plants in the spring plus use good pasture management techniques throughout the year to help improve and thicken the stand of desirable forages. The field photo at the bottom of the page shows a pasture field in late April with flowering buttercup.

AG CENSUS CONFIRMS GEOGRAPHIC & COMMODITY SHIFTS IN THE KENTUCKY FARM ECONOMY

- Will Snell, March 2024

The twenty-year time frame between the latest USDA Ag Census (2022) released earlier this year and the 2002 Ag Census occurred during a period of dramatic changes in Kentucky agriculture. During this two-decade period, the tobacco buyout was passed (in 2004) and implemented (2005-2014), the Kentucky Agricultural Development Board made significant investments to support ag diversification across the Commonwealth, and the state's agricultural economy benefited greatly from growth in grain receipts (increased by more than 400%) and poultry receipts (increased by more than 200%). On the other end of the spectrum, tobacco receipts fell by 44% from 2002 to 2022, while dairy sales increased less than 10%. Overall, the Census data reveal that the market value of agricultural products sold in Kentucky increased from \$3.1 billion in 2002 to \$8.0 billion in 2022. However, the increase was not spread uniformly across the state. The two most western Kentucky Agricultural Statistical Districts (Purchase and Midwestern) experienced increases surpassing 200%, while the Eastern and Northern Kentucky districts realized minimal gains (53% and 27% respectively).

Table 1: Market Value and Market Share by Kentucky Agriculture Statistical District (2002 vs 2022)

	2022		2002		
KENTUCKY AGRICULTURAL STATISTICS DISTRICT	MARKET VALUE OF AGRICULTURAL PRODUCT SALES	MARKET SHARE OF KY AGRICULTURAL PRODUCT SALES	MARKET VALUE OF AGRICULTURAL PRODUCT SALES	MARKET SHARE OF KY AGRICULTURAL PRODUCT SALES	GROWTH IN AGRICULTURAL PRODUCT SALES (2022 VS 2002)
BLUEGRASS	\$1,706,675,000	21.3%	\$940,762,000	30.5%	81.4%
CENTRAL	\$1,728,024,000	21.6%	\$647,960,000	21.0%	166.7%
EASTERN	\$282,957,000	3.5%	\$184,877,000	6.0%	53.1%
MIDWESTERN	\$2,732,209,000	34.1%	\$718,189,000	23.3%	280.4%
NORTHERN	\$182,479,000	2.3%	\$143,689,000	4.7%	27.0%
PURCHASE	\$1,373,408,000	17.2%	\$444,605,000	14.4%	208.9%
KENTUCKY	\$8,005,752,000		\$3,080,082,000		159.9%

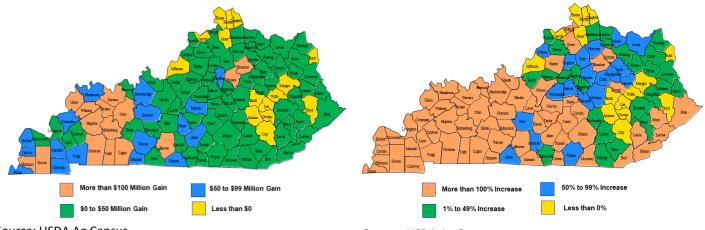
Source: USDA Ag Census, For a list of counties in each of the Kentucky Agricultural Statistics Districts

Collectively, the Midwestern and Purchase regions accounted for 51.3% of Kentucky ag sales in 2022 compared to 37.7% of sales in 2002. The largest dollar gains by county recorded over the twenty-year period occurred in Graves County (+\$323.5 million), Daviess County (+\$273.2 million), McLean County (+\$217.2 million), Christian County (+\$186.7 million), and Webster County (+\$181.6 million). Fifteen Kentucky counties, primarily in eastern and northern Kentucky experienced losses in ag sales from 2002 to 2022.

During this twenty-year period Kentucky grain (corn, soybeans, and wheat) acres harvested increased by 40%, while the state's tobacco acres fell 60%. The Kentucky cattle inventory declined 22% from 2002-2022, dairy cow numbers were 62% lower, while the number of broilers sold were fairly steady, dropping only 3%.

Figure 1: Dollar Change in the Market Value of Agricultural Product Sales (2022 vs. 2002)

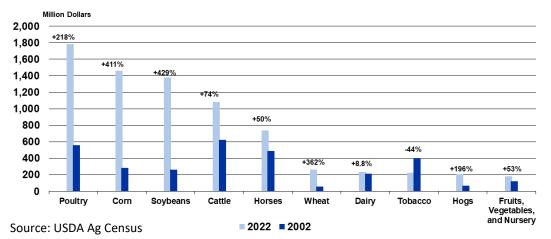
Figure 2: Percentage Change in the Market Value of Agricultural Product Sales (2022 vs. 2002)



Source: USDA Ag Census

Source: USDA Ag Census

Figure 3: Market Value of Kentucky Agricultural Sales (2022 vs. 2002)



Snell, W. "The Ag Census Confirms Geographic and Commodity Shifts in the Kentucky Farm Economy.

" Economic and Policy Update (24):3, Department of Agricultural Economics, University of Kentucky, March 28th 2024.

HORSE FARM MANAGEMENT PRACTICES



IMPACT OF MARCH 19 TEMPERATURES ON WHEAT

- Carrie Knott

Across Kentucky almost all of the wheat crop has jointed (<u>Feekes 6</u>) and much of it has developed at least two nodes (<u>Feekes 7</u>). When temperatures dropped into the teens and low 20's (°F) overnight March 19 (Table 1), we once again find ourselves asking the question: Will the low temperatures a couple of nights ago damage this year's wheat crop?

For wheat fields that are <u>Feekes 5</u> or less advanced, these temperatures should not harm the wheat. The growing point was still below the soil surface and well protected by the soil temperatures.

For wheat fields that were at <u>Feekes 6 or later</u>, damage <u>may</u> be possible. The national rule of thumb is that wheat at this growth stage is damaged when temperatures are 24°F or less for 2 or more hours. Although there are certainly more factors that contribute to severity of freeze damage than simply duration of a threshold temperature (many of which we are investigating), this is still the most widely accepted condition to 'trigger' a need to scout fields for damage.

When scouting for freeze damage in wheat, it is important to remember that <u>a minimum</u> of four to five days of good growing conditions (high temperatures exceeding 40°F) are needed before damage becomes visible. In reality, waiting a full week to ten days generally makes it easiest to see freeze damage. Therefore, Tuesday March 26 would be the ideal time to begin scouting fields for freeze damage.

Even if freeze damage is found, this does not immediately indicate that final grain yield will be impacted. Wheat has a tremendous ability to redistribute its resources to living tillers and therefore compensate for primary stems and tillers that may be lost in the freeze. This can result in little to no yield impact. If damage is found, refer to Figure 1 and AGR-253: Identifying Damage and Estimating Yield Reductions following a Spring Freeze in Winter Wheat to help determine potential yield reductions based upon estimated damage observed in the field.

For a visual guide to identify freeze damage refer to <u>AGR-253: Identifying Damage and Estimating Yield Reductions</u> following a Spring Freeze in Winter Wheat.

Figure 1: Estimated yield loss following spring freezes at different growth stages

Growth Stage	Feekes	Zadoks	Temp. Injury can Occur (≥ 2 hrs)	Primary Symptoms	Visual Damage	Estimated Yield Effect (% Reduction)
Stem Elongation 4 to 9	4 to 9	4 to 9 30 to 39	24°F	Death of growing point Leaf burning and yellowing	Minor	0
					Moderate	0 - 10
			Lesions, splitting, bending of stems Odor	Severe	0 – 20	
Boot 10	10	40 to 49	28°F	Floret sterility Spike trapped in boot	Minor	0 - 20
	1000				Moderate	n/a
			Damage to stems and peduncles Leaf discoloration	Severe	n/a	
Heading 10.1 to 10.5 50	10.1 to 10.5	50 to 58	30°F	Floret sterility Bleached or white awns or spikes	Minor	0 - 20
					Moderate	0 - 45
			Damage to stems and peduncles Leaf discoloration	Severe	30 – 50	
Flowering 10.5.1 to 10.5.3	10.5.1 to		30°F	Floret sterility Bleached or white awns or spikes	Minor	n/a
	10.5.3				Moderate	n/a
		Damage to stems and peduncles Leaf discoloration	Severe	60 - 85		

Source: Knott, 2020. https://acsess.onlinelibrary.wiley.com/doi/10.1002/cft2.20080



LaRue County
PO Box 210, 807 Old Elizabethtown Road
Hodgenville, KY 42748-0210

RETURN SERVICE REQUESTED

HORTICULTURE WEBINAR WEDNESDAYS



