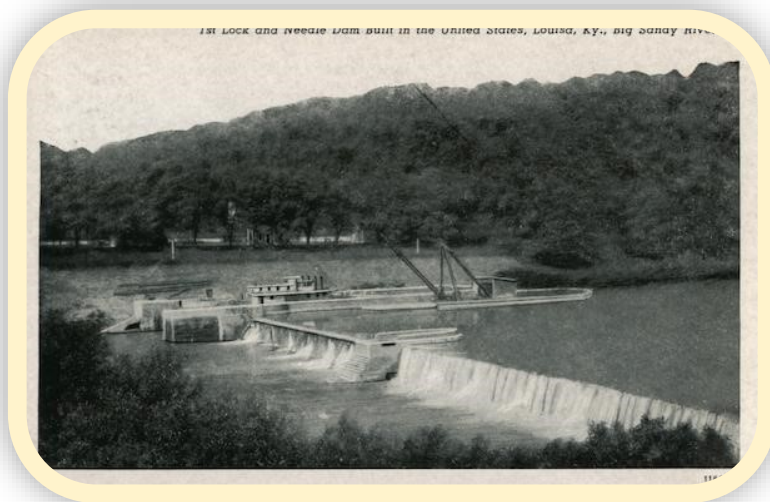




Completed in 1896, the first needle dam in the United States was situated on the Big Sandy River, bordering Kentucky and West Virginia, was once a bustling waterway with locks and dams to facilitate commerce. This river holds great significance within the community, having served as a vital transportation route in the 1800s. The dam played a crucial role in enhancing river travel from its construction until it was deemed unnecessary in 1942.

The Big Sandy River and its two tributaries, (Kentucky's tributary is the Levisa and Fort Gay's tributary is the Tug), run along the border of Kentucky and West Virginia, were once considered for channelization. This plan involved constructing a series of locks and dams to create slackwater for commercial navigation. The area's challenging landscape hindered the development of roads, making the river a vital transportation route.

In Louisa, Kentucky and Fort Gay, West Virginia, the remnants of Lock No. 3 can be found. After a 14-year construction period, this lock was notable for its 270-foot-long movable needle dam, the first of its kind in the United States, and was designed to provide a lift of 10.6 feet. The lock chamber itself was 158 feet long and 52 feet wide.



**For More Information, Please Contact us at:**

Lawrence County Extension Office • (606)673-9495 • <https://lawrence.ca.uky.edu>

**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.  
Lexington, KY 40506



Disabilities  
accommodated  
with prior notification.

## Agriculture Natural Resources (ANR)

### *McCormick's Host HBCA meeting*

Imagine a hay feeding system where you did not have to use a tractor for months at a time and that allowed you to build up pasture fertility without applying commercial fertilizer. What if this same system also kept your cattle clean during the winter without coats caked in mud and manure, allowed you to creep graze fall-born calves, and built up the organic matter levels in your pasture soils. As far-fetched as this may sound, all these benefits are possible with an innovative winter-feeding technique called Bale Grazing.

At the Highlands Beef Cattle Association monthly meeting held at Kevin and Bernice McCormick's, Greg Halich, Extension Professor and Specialist, came to discuss his research in bale grazing. He polled the group for interest in his discussion. One hundred (100%) percent of participants agreed that they would appreciate the benefits that bale grazing has to offer. Out of 35 attendees, none of them were implementing bale grazing or had heard of it. Twenty-one (21) out of thirty-five (35) people said they would at least like to try it out, with 10 people saying they would implement this winter. That shows a potential of 60% success rate in future bale grazing. One hundred (100%) percent of the audience gained knowledge and complete understanding of the topic. Although this will be a short-term outcome for now, it can become a long-term outcome after producers experience the benefits of bale grazing for themselves.



**McCormick's livestock**

## 4-H Youth Development

### *Inspiring Creativity and Skill Development through School 4-H Project Days*



**BES students displaying their 4-H projects**

The School 4-H Project Days at Louisa East Elementary and Blaine Elementary School proved to be a remarkable success, engaging forty-five (45) enthusiastic students in a variety of hands-on projects. This program offered a diverse range of activities, including wood-working, photography, cooking, art, sewing, and terrarium gardening, allowing students to explore and develop new skills.

Participants eagerly embraced the opportunity to showcase their creativity and craftsmanship. The excitement was palpable as students diligently worked on their projects, guided by supportive four (4) 4-H volunteers and three (3) teachers. The sense of accomplishment and pride was evident in their smiles as they completed their creations.

The projects were judged, and those who received blue ribbons earned the chance to compete at the county fair, a testament to their hard work and dedication. This recognition not only boosted their confidence but also encouraged them to pursue their interests further.

Overall, the School 4-H Project Days highlighted the importance of providing students with opportunities to learn practical skills, express their creativity, and gain recognition for their efforts. This program exemplifies how 4-H initiatives can positively impact youth by fostering a love for learning and personal growth.



## Family and Consumer Sciences (FCS)

### *Culinary Class Prepares Thanksgiving Feast*

In November 2024, FCS Agent, Deana West had the incredible opportunity to work with 20 students from Lawrence County High School's Culinary Class for a special all-encompassing Thanksgiving program. As the new Family and Consumer Science Extension Agent for Lawrence County, this was one of her first big projects, and she couldn't have been more excited to teach these teenagers valuable life skills in the kitchen, while also creating lasting memories.

The plan was ambitious: in one day, they would prepare a full Thanksgiving meal, complete with a beautifully set table, and a time of reflection and gratitude. It would take many days of planning and 8 nonstop hours of hard work, but she was confident that the students would rise to the challenge.

Together, they tackled an extensive menu of delicious, homemade dishes. The day began by a demo on prepping a thawed turkey to roast in the oven and a turkey breast to cook in a crock-pot. They also made creamy mashed potatoes and turkey gravy from scratch. Other dishes included green beans, mac and cheese casserole, broccoli casserole, corn pudding, rolls, dressing, caramelized baked ham, banana pudding, candy apple salad, pumpkin crumble cake, and freshly baked brownies. The students were even guided as they brewed sweet tea, ensuring the meal would be nothing short of perfect.

As the students worked through each dish, Mrs. West seized the opportunity to teach them important culinary techniques, like how to create a mirepoix base and the art of making gravy. Beyond the technical skills, they discussed employability skills such as teamwork, patience, and how to problem-solve when things didn't go according to plan—skills that are just as valuable outside of the kitchen.

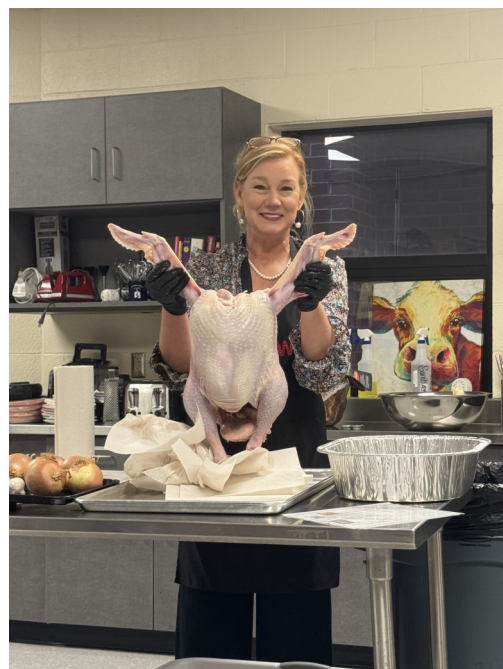
After the cooking was complete, they moved on to setting the table. Students were taught how to create a welcoming and festive table setting, emphasizing the importance of table etiquette. They practiced using proper utensils, napkins, and placing the food just so. Once the table was set, the students served each other, and everyone sat down together to enjoy the fruits of their labor. Everyone agreed the food was absolutely delicious, and it was an incredible moment of pride for everyone.

As they ate, the room was filled with gratitude. They discussed what each was thankful for and encouraged one another. It was a truly heartwarming moment, seeing these teenagers share their appreciation not only for the meal but also for the teamwork and camaraderie which had built throughout the day.

After the meal, students were tasked with cleaning up the entire kitchen and classroom together. This final step was another lesson in responsibility. The entire process was successful, and the students had grown in so many ways—not just as budding chefs, but as individuals who had learned valuable life skills.

When asked how they felt about the day, their responses made it all worthwhile. One student said, "This has been the best day of school ever." Another proudly declared, "I can now fix this stuff at home." Others marveled at their accomplishments, saying, "I can't believe we made all of this" and "We learned so much."

Reflecting on the day, it was obvious Mrs. West couldn't help but feel a deep sense of gratitude for being able to do this work. She states she would always be an educator at heart. She feels passionate about teaching and empowering students, and this program was a perfect reminder of why she loves being a part of Extension. She summed up her thoughts by adding, "This FCS Thanksgiving program was a total success, and I look forward to many more opportunities to create passion and excitement for learning in Lawrence County."



*New FCS Agent, Deana West*

## Nutrition Education Program (NEP)

### *Creating Healthier Lawrence County Families*

The Nutrition Education Program Senior Assistants partnered with Fallsburg Elementary School, Blaine Elementary School, Louisa East/West Elementary School, and Lawrence County Middle & High School Family Resource Youth Service Coordinators (FRYSC) to offer the Healthy Choices for Everybody curriculum to parents. The FRYSC coordinators were looking for a series that would address nutrition, health, food safety, the importance of family mealtimes and planning meals. We all have heard the phrase “lead by example.” The Healthy Choices for Everybody curriculum provides parents with knowledge and skills for behavior changes which supports a healthy lifestyle. According to the handout *Home Is Where the Health Is* (FSC7-188) “You teach by your example. Your child adores you and wants to be like you. Children grow and thrive in a happy home.”

Seven (7) required curriculum lessons were taught at each school site. The Healthy Choices for Everybody required lessons included: Healthy Cooking, Food Safety, Healthy Affordable Meals, Shifting to Healthier Choices, Fruit & Vegetables, Reading Food Labels and Better Beverage Choices for Everybody. As a result, 100% of participants showed improvement with at least two positive food changes and improved food safety methods, such as washing hands more often; cleaning items/surfaces more often after contact with raw meat or seafood; and using a meat thermometer more often. Exit behavior checklist questionnaires also revealed that 100% of participants plan meals in advance, 75% eat fruit more often each day, 88% cook dinner at home more weekly and 100% follow the recommended practices of not thawing food at room temperature. In addition, 94% reported they make small changes to be active more often and 88% drink regular soda less often. The NEP Assistant enrolled and graduated sixteen (16) families with a total of (61) members in the families.



## Community Economic Development

### *Lawrence Co. 4-H & LCHS FFA host Harvest Moon Gala*

The Harvest Moon Gala is more than just an event; it's an opportunity to come together as a community and show support for the young people who are shaping the future of agriculture. The participants enjoyed an evening of local talent, locally home-grown food and desserts prepared and served by Lawrence County Culinary Students, 4-H Teens, and FFA Students, and an event that celebrates our agricultural roots and the hardworking individuals who bring us together.



*Extension Staff and Conservation District Employee*

### **Lawrence County Extension Agents**

*Maelyn Dotson*

Maelyn Dotson  
CEA 4-H Youth Development

*Lane Hall*

Lane Hall  
CEA Agriculture/Natural Resources

*Deana West*

Deana West  
CEA Family & Consumer Sciences