

February 2024

AGRICULTURE NEWSLETTER

PULASKI COUNTY EXTENSION OFFICE

UPCOMING CHANGES TO CAIP PROGRAM 2024

In 2024, Pulaski County will be changing the way County Agriculture Investment Program (CAIP) funds will be administered. There will be major changes implemented this year.

Number one: The state Agriculture Development Board has implemented a tiered system within CAIP. The tiered system means: Each eligible item in CAIP has been given a cost-reimbursement percentage (75%, 50%, or 25%) denoted in red in the Investment Area Guidelines.

That item may only receive the percentage listed. For example, if you spend 100 dollars in an approved area, you may get \$75.00, \$50.00, or \$25.00 dollars back depending on the percentage allowed.

More information on specific investment areas can be found here

<https://www.kyagr.com/agpolicy/2024-Program-Guidelines-and-Applications.html>.

Number Two: The Pulaski County Agriculture Council has voted to move to an every other year CAIP program system. Pulaski County we will only be administering a CAIP program in even years. Starting this year, 2024. The next year that the funds will be available will be 2026, and so forth. All investment areas will still be offered, and it will still be a prorated system of approval for funds.

With this change we will be able to give more money to each approved producer. This will hopefully allow the producer to complete those project that will have a more impactful effect on the operation now and in the future.

This will also move signups from February/March to sometime in May/June of 2024.

Signups will still be advertised like before in the newspaper, social media, and my newsletter.

With these changes there will be questions. I am planning on having 4 informational/educational meetings during the 3 week signup period in, May/June, to help people better understand the changes, and how to fill out the applications to make sure that we are all on the same page.

As always if you have questions or concerns please feel free to call me at the Pulaski County Extension office at 606-679-6361.



THE FACE OF AGRICULTURE IN 2050

Droughts, deluges, and high temperatures are harbingers of a changing climate. Agricultural systems must change, perhaps radically, to counter climate change and continue feeding the world. What systems will produce our food in 2050?

Proposed systems include organic agriculture, agroecological farming (based on ecological principles), sustainable intensification, regenerative agriculture (attempts to replenish and strengthen the soil), permaculture (emphasizes perennials and polyculture), and local food production to reduce 'food miles'. Completely new approaches to food production include vertical farming (growing food crops in completely controlled environments), eating insects, using fermentation to produce fats, proteins, and lab grown meat. Reducing food waste and adopting plant-based diets are touted as ways to increase food supplies in the face of a changing climate. Each of these schemes have enthusiasts that promote their reduced effects on climate and their ability to sustainably feed the world.

Which system or systems will represent the agriculture of the future? Will it be a more sustainable version of our current high-input system, a radically different system that has little in common with current systems, or something in between? No one knows, but we do know that the system(s) of the future will have to, first, provide adequate supplies of nutritious food to the world's population. They must do this while operating in environments less suitable for crop production than our current environments. Secondly, the system(s) must not be labor intensive. The systems of tomorrow must minimize labor requirements while maintaining high productivity.

The good news is that the population is growing slower. The United Nations Population Group recently estimated that 66 countries have population growth rates below replacement levels. Some experts suggest that the world population may peak at 9.7 billion by 2050 and then start to decline (UN estimates place the peak closer to 2100). Reducing the rate of population growth will make it easier for any system to meet the demand for food. But the effect of the declining growth rate could be partially offset by an increase in the consumption of meat by more affluent societies.

Many of the proposed production systems minimize off-farm inputs in an attempt to create a self-sustaining system. These approaches usually result in lower yield. Lower yield means more crop land is needed to feed the population or, as described by George Monbiot in his 2022 book (*Regensis: Feeding the World Without Devouring the Planet*), an increase in agricultural sprawl. Expanding the crop land base usually involves bringing new land into production and cutting down forests which increases the greenhouse gas (GHG) emissions that fuel climate change. Lower yields require higher prices to economically sustain these systems. Low-yield agriculture systems may not be the best choice for the agriculture of the future.

Many of the proposed systems are labor intensive compared with the high-input agricultural systems common today. The world is rapidly urbanizing with nearly 70% of the world's population projected to live in urban areas by 2050 (compared with 30% in 1950). This long-standing trend of movement of people from farms to the city may reflect the poverty, unrelenting hard labor, and the lack of opportunity often associated with small share-holding agricultural systems.

It is unrealistic and unfair to expect food producers to live in poverty to supply cheap food to the rest of society. On the other side of the coin - will society tolerate high food prices to ensure that low-yield, labor-intensive production systems provide adequate income for the practitioners? It seems unlikely that labor-intensive systems will be feeding the world in 2050.

Will entirely new forms of food production replace conventional agriculture, based on green plants growing in the soil and animals that convert plants into high quality protein, by 2050? Vertical farms are insulated from a changing climate and require much less water than conventional agriculture, but so far, they seem to be limited to producing greens and they seem to have trouble showing a profit. High capital and energy costs (we are, after all, replacing the sun with electric lights) seem to limit these systems.

Fermentation and lab grown meats are currently receiving a lot of attention, but the scalability, GHG emissions, and consumer acceptance remain to be determined. Plant based 'meats' that increase the efficiency of food production by replacing animals are available to consumers, but their acceptance seems to be faltering.

What will be the face of agriculture in 2050? There are clearly many options; some are proven systems in operation while others range from concepts still on the laboratory bench to proposals requiring significant changes in dietary habits. No one has a crystal ball that is clear enough to predict which system(s) will prevail in 2050, especially given the complications and uncertainties imposed by climate change.

The agricultural systems that prevented a Malthusian disaster for the last 100 years, when the world population increased more than four-fold (from 1.8 billion in 1920 to 7.8 billion in 2020), exhibited steady increases in yield and declining labor requirements. The systems feeding us in 2050 will have to, in some form, continue increases in productivity and lower labor requirements. And, above all, they will have to be economically viable – providing a living wage to the producer of food that all consumers can afford. I am optimistic that human ingenuity will, barring complete and total disaster from climate change, find systems that will meet these requirements and feed the world.

DR. DENNIS EGLI UK PROFESSOR EMERITUS (859)218-0753 DEGLI@ULY.EDU

PRIVATE PESTICIDE TRAINING

Upcoming Dates:

- FEB. 3RD AT 9 AM: WOODSTOCK COMMUNITY CENTER
- FEB. 22ND AT 6 PM: WOODSTOCK COMMUNITY CENTER
- MARCH 6TH AT 9 AM: PULASKI CO. EXTENSION OFFICE
- MARCH 13TH AT 9 AM: PULASKI CO. EXTENSION OFFICE

Call (606) 679-6361 to RSVP
Pulaski County Extension Office
P.O. Box 720
28 Parkway Dr.
Somerset, KY 42502

Cooperative Extension Service

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

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Lexington, KY 40506



2024 KATS Schedule

April 4: Planter Workshop

Hands on training covering basic to advanced planter functions so participants can maximize planter performance.

May 21: Crop Scouting Workshop

Composed of individual scouting sessions in the areas of disease, growth staging, weed id, and soil nutrition, this is a beneficial workshop for new and experienced producers, agriculture interns as well as a great refresher for others.

June 6: Soil Properties and Their Impact on Delivering Water and Nutrients to Your Plants

We will examine two soil pits with distinctly different profile properties (Loess/Sandstone/Limestone) to discuss how they will influence water and nutrient retention and delivery.

August 29: Field Crop Pest Management and Spray Clinic

A hands-on workshop that will cover spray technology, fungicide application, herbicide symptomology, stink bug control, and more.

Date TBD: Drone Pilot Prep Course

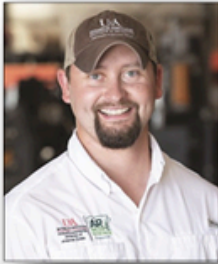
An intensive 2-day workshop to prepare candidates for the FAA's part 107 Drone Pilot Certification exam.

SAVE THE
DATE

KCHC Kentucky Crop Health Conference

Feb. 8, 2024 - National Corvette Museum - Bowling Green, Ky.

Speakers include University of Kentucky Extension Specialists
and invited nationally prominent Extension Specialists from across the United States



Thomas Butts
University of Arkansas

Topic: Drone Herbicide Applications: What Do We Need to Know for Success?



Nicholas Seiter
University of Illinois Urbana-Champaign

Topic: Above- and below- ground traits for insect management in corn – new tools, old pests, and resistance



Gregory Tylka
Iowa State University

Topic: Soybean Cyst Nematode: Past, present, and future

Carl Bradley
University of Kentucky

Topic: Red Crown Rot of Soybean: Disease Management and Potential Impacts of this New Disease on Soybean Production in Kentucky



Travis Legleiter
University of Kentucky

Topic: Dealing with the Stretch - Early Planted Soybean and Weed Control

Raul Villanueva
University of Kentucky

Topic: Abundance of Emergent Pests in the 2022-23 Corn and Soybean seasons in Kentucky



Kiersten Wise
University of Kentucky

Topic: It's always something! New corn disease concerns for Kentucky

 **Martin-Gatton**
College of Agriculture,
Food and Environment
University of Kentucky.



Tickets on sale Nov. 1, 2023

Scan QR Code or visit: <https://kchc2024.eventbrite.com>

(non-refundable after Jan. 25, 2024)

Lunch included - CCA and pesticide applicator CEUs will be available

SHEEP & GOAT Educational Meeting & Lamb Dinner

Who: The County Extension Offices of Wayne, Clinton, McCreary, Pulaski, Russell and Pickett (TN) Counties; Kentucky State University; the Southeast Kentucky Sheep Producers Association (SEKSPA); and the Wayne Co Sheep & Goat Association Chapter of SEKSPA.

When: Monday, February 5, 2024. Registration is from 5:30-6:00 pm EST. Lamb Dinner starts at 6:00 with the educational program to follow.

Where: Registration, dinner, and program will be held at the Wayne Co Extension Office at 255 Rolling Hills Blvd., Monticello, Kentucky.

How: Round-Table discussion led by: Dr. Travis Sulfridge, DMV; Dr. Patrick Angel, SEKSPA; Guy Taylor, Somerset Community College; Lester & Larry Brashear, Brashear Heritage Farm.

DOOR PRIZES!

Registration Required. Please register by calling the Wayne County Extension Office at 606-348-8453. \$10.00 per family.

Your registration fee will include a delicious lamb dinner with sides and a One-Year Membership to SEKSPA

This workshop qualifies for CAIP education credits



Hazardous Weather Preparedness Class



Thursday, March 14, 2024

6pm-7pm

**Hal Rogers Regional Fire Training Center
180 Oak Leaf Lane,
Somerset, KY 42503**

FREE EVENT!! Come to learn, leave prepared!

Register Here: <https://forms.gle/v6F5WBcB3xtU8CsAA>



Brought to you by the National Weather Service Jackson, KY

Pulaski Farm Bureau



*AG-grow
Workshop*

Topics Covered

Marketing Farm Products

Pesticide Class

Estate Planning

Seed Art

Thur. Feb. 22, 2024

**Woodstock Community
Center ~ 6:00pm**

13215 Hwy. 39

Somerset, KY 42503

RSVP to Delana (606)679-2360

Dinner will be served at 6pm
Jonathan Shell, *Ag Commissioner*
has been invited to speak.



SOUTH CENTRAL KY TOBACCO GROWERS

Thursday, February 29

Garrard County Extension Office
1302 Stanford Road, Lancaster, KY 40444



6:00pm: Meal begins—reservation required

6:30pm: Tobacco Production Update & Disease Management

Dr. Bob Pearce, UK Tobacco Specialist

7:20pm: Tobacco GAP Certification & Update
Amy Rochkes, Gap Connection Representative

8:30pm: Closing Comments & Announcements

ALL tobacco growers are invited and *urged* to attend.

This meeting qualifies for one hour commercial pesticide applicator CEU. This program is approved for GAP Certification and Re-Certification by all buying companies and market locations.

COOPERATIVE EXTENSION



Make your meal reservations by noon, February 26 by calling your county office:

Boyle—859-236-4484

Mercer—859-734-4378

Estill—606-723-4557

Lincoln—606-365-2447

Casey—606-787-7384

Madison—859-623-4072

Garrard—859-792-3026

Pulaski—606-679-6361

Rockcastle—606-256-2403

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Disabilities
accommodated
with prior notification.



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P.O. Box 720
Somerset, KY 42502
Phone: (606) 679-6361

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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.

Visit the [CES Program and Staff Development](#) website for additional guidance.

Questions may be directed to Stacy Miller at Stacy.miller@uky.edu or (859) 257-1727.