

# The FARMACY

*"Agriculture is our wisest pursuit because it will in the end contribute most to real wealth, good morals and happiness"*  
- Thomas Jefferson -

Agriculture & Natural Resources Newsletter

Spring 2025

**CAMPBELL COUNTY** <sup>2025</sup> *Spring Cleanup*

**MAY 9 + 10 • 8 AM – 5 PM**

**RESIDENTS ONLY** - BRING PHOTO ID OR PROOF OF RESIDENCY  
**PARTICIPANTS MUST UNLOAD OWN VEHICLE** (LIMITED ASSISTANCE AVAILABLE)

*Locations:*

- Frederick's Landing**  
100 Frederick's Landing, Wilder
- Pendery Park**  
4113 Williams Lane, Melbourne
- Campbell County Road Department**  
1175 Racetrack Road, Alexandria

*Accepted Items:*

- ✓ FURNITURE
- ✓ MATTRESSES
- ✓ YARD DEBRIS
- ✓ TRASH + DEBRIS
- ✓ ELECTRONICS (NO TVS)
- ✓ ALL OF THE ABOVE, AND...
- ✓ APPLIANCES (FREON OK)
- ✓ SCRAP METAL (REMOVE FLUIDS)
- ✓ LEAD-ACID BATTERIES
- ✓ ELECTRONICS (LIMIT 1 TV)
- ✓ PROPANE TANKS
- ✓ TIRES (LIMIT 8; RIMS OK)

**NOT ACCEPTED:** Paint, Liquids, Junk Vehicles/Boats, Hazardous Waste, Fluorescent Bulbs/Tubes, Dirt, Concrete, Rocks, Tanks/Cylinders

(859) 547-1866   [campbellcountky.gov](http://campbellcountky.gov)   [solidwaste@campbellcountky.gov](mailto:solidwaste@campbellcountky.gov)



*Michelle Simon*

**Michelle Simon**

Campbell County Extension Agent for Agriculture and Natural Resources

E-mail: [michell.simon@uky.edu](mailto:michell.simon@uky.edu) | Phone: 859-572-2600

## Livestock Registry

Learning that your livestock has escaped can be a nightmare. Why not let us help you alleviate some of that stress? Completing this livestock registry allows dispatch and first responders to directly contact you in the event that your animals get loose. This not only expedites animal reunification but can help to prevent accidents involving lost animals. Please include as much detail as possible (species, animal color, ear tags, etc.).

[www.cccdcky.org/livestock-registry](http://www.cccdcky.org/livestock-registry)

**Livestock Registry**

First Name \*      Last Name \*

Farm Name (If Applicable)

Address \*

Phone \*

Secondary Phone

Email \*

Animal Type \*  
Choose one

Animal Type  
Choose one

Animal Type  
Choose one

Animal Type  
Choose one

Livestock Description \*  
Please be specific, including color, ear tags, etc.

Submit

# University of Kentucky Meat Cutting School Beef Processing Workshop



The University of Kentucky Meat Cutting School will be offering a Beef Processing Workshop. The workshop will be a hands-on experience with some formal lectures on the meats and livestock industries. Although experience is the best teacher, this workshop is designed to introduce basic slaughter techniques along with basic beef fabrication and ground beef skills. The workshop is hands-on is open to the first six paid participants that are serious about learning more about beef processing.

**When:** May 23rd to 25th

**Where:** University of Kentucky Meats Lab (325 Cooper Dr)

**Meeting Times:**

**Tuesday, May 23rd (2-4:30pm EDT)**

- Tour of the meats lab and pick up equipment for the weekend.

**Wednesday, May 24th (8am to 4pm EDT)**

- Hands-on Beef Slaughter
- Classroom lectures

**Thursday, May 25th (8am EDT)**

- Hands-on Beef Carcass Fabrication
- Ground Beef
- Discussion and workshop evaluation

**Cost:** \$500/person. Checks can be made out to the *University of Kentucky Meat Science*.

**Participants will receive:** hat, frock, kill floor apron, 6" boning knife, certificate of completion

**Registration can be mailed to Dr. Gregg Rentfrow (address below).**

**Who:** This workshop is open to the first 6 participants (paid).

**Questions/Contact:**

Dr. Gregg Rentfrow, Ph.D.  
205 W.P. Garrigus Building  
Lexington, KY, 40546

[gregg.rentfrow@uky.edu](mailto:gregg.rentfrow@uky.edu)  
859-257-7550



# CHICK DAYS 2025

## Learn About Chickens

**MARCH 24**

**6:30PM**

at

**Southern States**

2 S Jefferson St  
Alexandria KY



- Equipment required for chicks
- Brooder creation/ requirements
- Breed selection
- Starter feeds
- Caring for young birds
- Transitioning to layer feeds
- Question & Answer



## Too Wet to Soil Sample but Ideal to Check for Soil Compaction

Dr. Edwin Ritchey, University of Kentucky, Extension Soil Specialist

Dr. John Grove, University of Kentucky, Agronomy/Soils Research & Extension

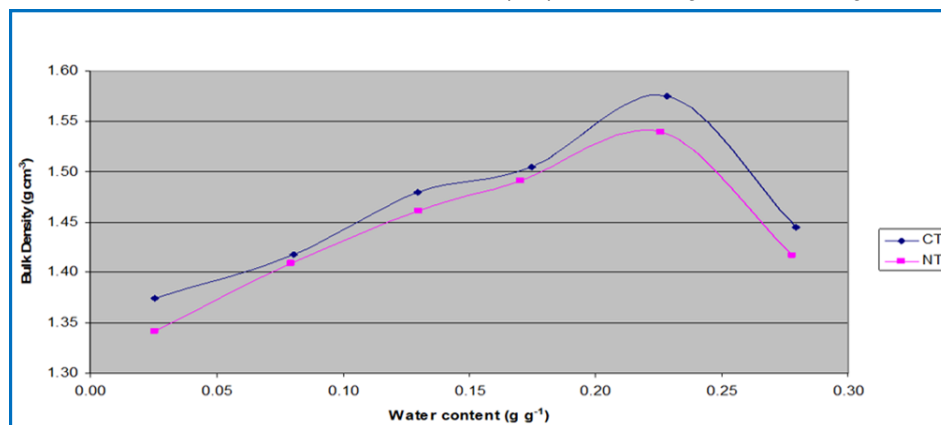
We know producers are ready for the soil to dry out so they can start topdressing wheat with their first shot of nitrogen. This also makes us think about soil compaction, which is simply compressing a given volume of soil into a smaller volume.

Compaction can occur in different places in the field and can be due to different reasons. The main reason for soil compaction in row crop production comes down to doing some operation when the soil is too wet. Soil compaction reduces the soil pore space, the amount of air and water a soil can hold, and the pore space continuity that supports air and water exchange/movement in the soil. Compacted soil also has higher densities that restrict root proliferation and water infiltration - and these can reduce crop yield. Further, if compacted areas are found on sloping fields, reduced infiltration can promote surface water runoff and thus soil erosion.

The main types of compaction we deal with in Kentucky are due to traffic, tillage, and planting (sidewall). The ideal soil moisture for a compaction event is at or near the soil's field capacity (**Figure 1**). Field capacity in Figure 1 is around 0.20 to 0.25 g water per gram of soil (20 to 25 % moisture). Field capacity is when free water ceases to drain due to gravity. This is roughly when the soil first dries enough to traffic it without leaving ruts. When soil is wetter than field capacity, ruts will form. This is another issue to contend with and though definitely not desirable, is really not the same as compaction. We can see in Figure 1 that as the soil moisture levels increase the soil bulk density (another measure of compaction) also increases, up to a point, then it decreases. The reason

the soil bulk density decreases after it peaks is because you can't compact water. This is where ruts would be formed if trafficked in the field.

most effective ways to create soil compaction. Another example is from multiple passes of a shallow tillage tool used for seedbed preparation (e.g. vertical tillage)



**Figure 1. Soil compaction as influenced by soil moisture and previous tillage. NT (no-tillage) and CT (plow tillage) soil organic matter contents were 3.2 and 2.7%, respectively.**

Tillage pans can form when tillage operations are conducted to the same depth year after year. The bottom edge of the tillage tool can cause dense pans to form. Other tillage compaction occurs when a tillage operation is executed when the soil is too wet. These "tillage pans" reduce water infiltration and accelerate erosion on sloping land. Soil erosion is a long-term detriment to field productivity, removing the topsoil and the soil nutrients contained there, reducing overall soil depth that plant roots can explore for water and nutrients. This loss in soil productivity can be exacerbated as even more soil is lost and even less water can infiltrate and refresh the soil profile.

A couple of tillage compaction examples come to mind. First, using a disc when the soil is too wet can create a compacted zone at the lower operating edge of the disc blades, regardless whether the operational element is a traditional curved blade or a less traditional vertical blade. This is one of the

when the soil is too wet. All these tillage tools will dry out the soil above the lower depth of operation but can effectively create compaction at that lower operating depth.

Sidewall compaction occurs when planting into wet soil. The sidewalls of the planter furrow are smeared/compacted, usually by the row opener, and plant roots can have difficulty growing outside the furrow/through the furrow sidewall. Of course, if sidewall compaction is occurring, then traffic compaction is probably also a concern. This is especially evident when tractor/and planter traffic patterns cause planted crop rows to be bounded on each side by a tire compacted interrow area. This is often called 'pinch-row' compaction - crop growth in the affected row appears stunted or pinched by the compaction found on each side.

Traffic compaction is due to field traffic when the soil is too wet. The degree of compaction is influenced by soil type, soil wetness, tire

pressure, load pressure, and the number of traffic events over a given area. Most of the time the entire field area is not compacted rather areas within a field that are wetter than the rest of the field and/or subject to greater traffic. Larger tractors, combines, grain carts, manure spreaders/injectors and other equipment weigh more than before and often have greater axial load, though less of the field area may be trafficked. Paths where grain carts travel or areas where trucks are parked/loaded can be confined, limiting overall compaction. With this in mind we want to discuss some approaches to identifying and dealing with soil compaction.

A standard soil probe in the hands of a skilled agronomist can indicate a lot about soil structure and density in the amount of resistance encountered when collecting a soil sample. Note the amount of pressure it takes to stick the probe in the ground, and if greater pressure occurs at a similar depth across a field. This is a good preliminary diagnostic for identifying soil compaction, but a more detailed approach is done with a soil penetrometer.

A soil penetrometer is a more accurate tool for determining the extent and depth of compaction. A soil penetrometer measures penetration resistance (PR), the amount of force needed to insert the penetrometer into the soil. A soil penetrometer has a pointed tip attached to the end of a rod that is connected to a load cell showing the amount of force needed as the rod tip move into and through the soil, proportional to the resistance encountered. Penetrometers usually have a dial facing the user so that PR values/thresholds can be viewed

as the penetrometer is inserted into the soil (**Figure 2**).



**Figure 2. A closeup of a penetrometer face, showing the amount/thresholds of resistance.**

The caveat to properly using a soil penetrometer is that soil moisture content matters. This is the purpose of this newsletter – NOW is a great time to check for compaction. It is generally agreed that a soil over 300 psi (lb/in<sup>2</sup>) is considered compacted, but a non-compacted soil can easily read over 300 psi in summer when soils are dry. If PR is determined when the soil is dry, or dry at a certain depth, then the information can be misleading. You want the differences in PR to be due to differences in soil density, not differences in soil moisture. The best time to take soil PR measurements is when the soil is thoroughly wetted throughout the entire soil profile, like now and for the next few weeks.

Soil compaction can be “mapped” with a penetrometer, by location and depth. Most penetrometers have marks every 3 to 4 inches on the shaft. Insert the penetrometer into the soil at a constant speed (**Figure 3**). Watch the PSI as the shaft is pushed into the soil and note the depth where a high PR resistance is observed. Do this in multiple field areas to determine if corrective

action is needed. Field edges and other high traffic areas are usually the most prone to compaction. Other areas to check include areas that are/have been trafficked at greater soil moisture levels than the rest of the field, areas with stunted plants, or areas that have standing water for longer periods of time. Mapping the compacted area will allow a producer to focus on specific field areas to address, rather than treating the entire field. Remember that the entire field area is being evaluated, one PR reading > 300 psi does not mean that the entire field needs to be treated. Look for areas where there are multiple high PR readings and treat those areas appropriately. Consult ID-53 for additional information for assessing soil compaction.

There are several ways to deal with soil compaction, depending on the extent and depth encountered. The first method might be to do nothing. Freezing and thawing will help to remedy shallow soil compaction. We don't get the same amount of freezing and thawing as more northern states, but still enough to

**(continued on next page)**



**Figure 3. A soil penetrometer being used to diagnose soil compaction in a wheat field.**

## Too Wet to Soil Sample but Ideal to Check for Soil Compaction

(continued from page 3)

help in some years. Also, plant roots can penetrate moderately compacted soils with adequate moisture and additional management might not be needed. The next approach is to do something when compaction is severe enough to warrant some additional management operation.

The additional management is usually going to include some sort of tillage operation. This is where the time spent mapping the soil compaction can pay off. A chisel plow works well at breaking up shallow compaction. Make sure the depth of operation is below the lower depth of the compacted zone. A chisel plow is usually going to require less energy to pull than other tillage tools used to deal with compaction, like a subsoiler. Use a subsoiler for compacted layers deeper than a chisel plow can address. Again, set the operating

depth below the depth of the compacted layer. In both instances a focused approach can be used to target only compacted areas in the field. This will save time and fuel and reduce costs. The best time to break up soil compaction is when the soil is dry, and remember the reason that compaction occurred - likely due to trafficking soil when the soil was too wet. Make sure that the soil moisture conditions are on the dry side of ideal for compaction breaking tillage. Don't create additional compaction while trying to alleviate compaction.

In summary, the best thing to do about compaction is to avoid causing it. Don't traffic soil when soil is too wet – wait for the soil to dry. This is not always possible and sometimes management operations must be done in less than ideal soil moisture conditions – leading to compaction. When suspected, try to diagnose compaction by soil probe,

plant and/or root growth, ponded water, or a soil penetrometer. Most of the time an entire field is not compacted, certain areas can be targeted so as to save time and money. Remember that a good time to detect and identify compaction is also a really good time to create compaction, so if you think a field is too wet to traffic then it is probably a good time to check for soil compaction.

Additional resources:

AGR-161, Soil Compaction in Kentucky (agr161.pdf (SECURED))

AGR 197, Compaction, Tillage Method, and Subsoiling Effects on Crop Production (agr197.pdf (SECURED))

ID-153, Assessing and Preventing Soil Compaction in Kentucky (id153.pdf (SECURED))

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“Like” Campbell County Agriculture and Horticulture on Facebook

## Campbell County Conservation District Rental Equipment



**Kasco  
Vari-Slice Seeder**

**Cricket/BBI  
Lime Spreader**



**Land Pride Seeder**

For rental information, contact the district office (859) 635-9587 or email [ccd@campbellkyconservation.org](mailto:ccd@campbellkyconservation.org)

## Managing Through Tough Times

**B**ack in 2015, Extension specialists across the Southeast (many of our current SAT contributors) came together to address the decline in the farm economy, specifically declining commodity prices and increasing financial pressure. The resulting publication is a compilation of articles on topics including financial and risk management, marketing, farm management, trade, and stress management. The publication provides strategies for navigating financial difficulties, reducing risk, and identifying opportunities for growth even during downturns. While the publication is approaching ten years old, the core management strategies and concepts are still pertinent as we face a very similar farm economy today.

### Key Farm Management Strategies include:

1. **Financial Resilience:** Carefully managing debt and maintaining

cash flow are key to building resilience. Work closely with lenders to help monitor financial health and consider restructuring loans when necessary to preserve adequate working capital.

2. **Cost Control and**

**Efficiency:** Reducing input costs, optimizing equipment use, and managing labor effectively can help improve profitability. Assessing operational expenses and cutting unnecessary expenditures are essential. Even the smallest changes can add up.

3. **Risk Management**

**Strategies:** Utilizing crop insurance, following an effective marketing plan, diversifying income sources, and engaging in collaborative farming can help mitigate financial risk. Exploring all available government support programs and financial assistance options can provide relief during downturns.

4. **Market Adaptation and**

**Diversification:** Considering alternative crops, livestock production adjustments, or producing for specialty markets can help maintain income. Understanding market trends and adapting production strategies accordingly is vital for long-term sustainability.

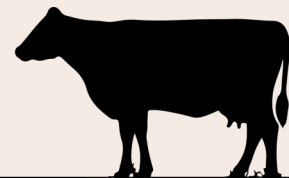
5. **Mental Health and Well-**

**being:** Economic stress can take a toll on farmers' mental health. Seeking support, engaging with extension services, and maintaining a strong social network can help manage stress, depression, and other challenges related to financial strain. For a deep dive on all economic topics, including the farm management strategies above, the full publication can be found here: "Surviving the Farm Economy Downturn".



## Forage Timely Tips

- Remove animals from waterlogged pastures to limit pugging and soil compaction.
- Continue grazing stockpiled tall fescue if available.
- Assess grass stands. If thin, consider frost seeding legumes.
- Begin frost seeding with at least 6-8 lb/A red and 1-2 lb/A ladino white clover on closely grazed pastures.
- On pastures with lower fertility, consider adding 10-15 lb/A annual lespedeza to the above recommendation.
- Consider applying N at 40 lb/A in mid to late February on some pastures to promote early growth (not on frost seeded pastures).
- Sign up for shared use drills for spring renovation.
- Apply lime and fertilizer according to soil test if not done in fall.
- Control problem weeds like buttercup in late February when day temperatures are forecast above 50 degrees for 3 consecutive days.



# Fewer Cows in 2025

**Tuesday, February 4, 2025**

USDA released its Cattle inventory report on Friday, January 31st. This report is the benchmark for data on the number of total cattle in the U.S. and estimates of beef and dairy cows, replacement heifers, and stockers on small grain pastures. The data is the starting point for estimates of beef production and prices in the future.

The big numbers in the report included a January 1, 2025, total cattle inventory of 86.66 million head, down 1 percent from the year before and the fewest since 1951. Beef cows were down 0.6 percent to 27.86 million head the fewest since 1961. Heifers for beef cow replacement were down 1 percent to 4.67 million, the fewest since 1949.

One of the interesting components of these statistical reports are revisions. USDA gathers the surveys and other information from other surveys and data reports and revises the previous year's data if warranted. Sometimes revisions are important and sometimes they are a non-event. This report had some revisions that are interesting. Some states were not reported beginning in this survey due to budget cuts. While producers were surveyed, their numbers were only included in the total U.S. statistics.

Today's article includes comments from SAT livestock economist writers to offer a few thoughts on their state and the report across the South.

**Matt Fischer, Clemson University:**

South Carolina cattle and calves inventory expanded in 2025 from 2024. Total cattle calves inventory on January 31, 2025, was reported 295,000, up 2% from 2024. Cow inventory increased in 2025 by 1%, from 156,000 to 157,000. Unfortunately, USDA did

not provide inventory on any other category. Leaving speculation where the missing 4,000 head would be categorized, hopefully in unreported heifer inventory. Regardless, South Carolina reported inventory expansion in 2023 only to follow liquidation trend in 2024.

**Will Secor, University of Georgia:**

Broadly, the report was in-line with expectations. Georgia's total cattle inventory and its inventory of beef cows declined by about 2% in 2025 compared to 2024. This confirms that there was no herd rebuilding in Georgia last year. However, these declines are smaller compared to last year despite dry weather struggles throughout much of the year. Additionally, the number of beef cow replacement heifers held steady at 85 thousand head.

**Hannah Baker, University of Florida:**

In Florida, the total number of cattle and calves was unchanged at 1.56 million head. The number of beef cows that calved in 2024 slightly increased by 0.3% (3,000 head) to 865,000 head. Florida is now ranked 10th in beef cattle production (9th last year). Florida's 2024 calf crop was 1% larger than 2023's at 770,000 head. The number of beef cow replacements remained unchanged at 115,000 head, unlike last year when we saw a 4% decline. While we don't see major signs of expansion, we do see signs of stabilization starting in the Florida beef cow herd.

**Kenny Burdine, University of Kentucky:**

The overall decrease in beef cow numbers was not a surprise. But cow slaughter really pulled back in late 2024 and I do think the decrease in beef cow numbers was smaller than what many expected in the first half of

2024. The 200,000 cow downward revision to 2024 beef cow numbers is also worth noting. My general take on beef cow numbers is that liquidation is slowing, but that is primarily due to reduced culling.

Beef heifer retention was down by about 1% (also after a downward revision to last year), which was largely expected given the number of heifers on feed. The main point here is that we are still not currently retaining enough heifers to grow the beef herd given a reasonable assumption of cow slaughter in 2025.

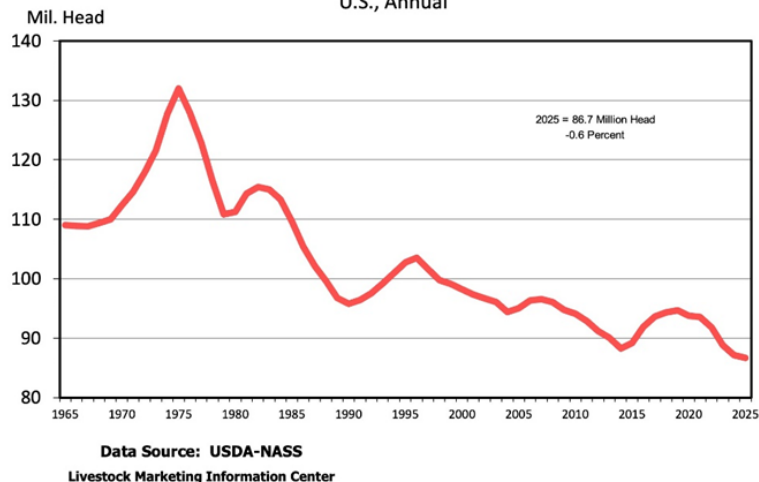
If weather allows, I think it is very possible that we see more heifer retention during 2025. It's also good to remind ourselves that the January 1 report is a snapshot of inventory. There are additional heifers in growing programs (grazing, backgrounding, etc.) that could also potentially be bred this year if market and weather conditions remain favorable. And the inverse is also true – not all of those heifers being held for replacement purposes will end up entering the cow herd.

I don't know what to make of the decrease in cattle grazing small grains. The calf crop was smaller last year, wheat grazing prospects were late to develop, and I also think a lot of calves moved early because it was dry for much of late summer-early fall.

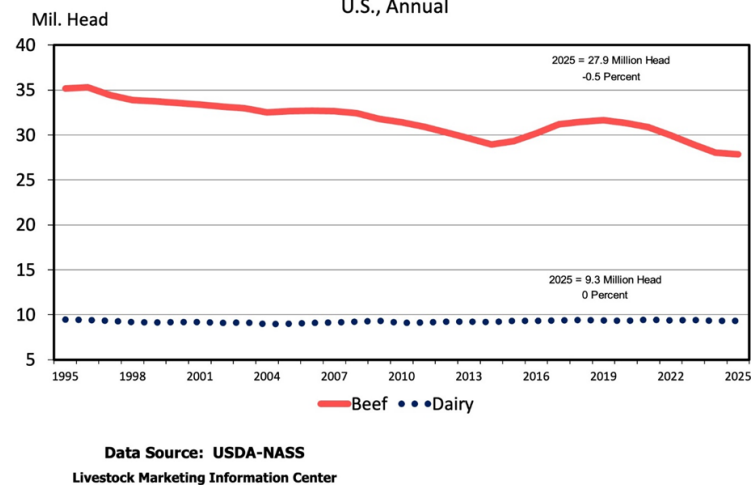
NASS estimated our beef cow herd to be down by 38,000 head. This was consistent with what our county Extension agents had been telling me. Land constraints are real in the Commonwealth. We have lost a lot of pasture ground to row crop and development pressures. High land prices do tend to negatively impact cow numbers, especially for young and beginning farmers. I did not expect to see the increase in the estimated number of heifers held for



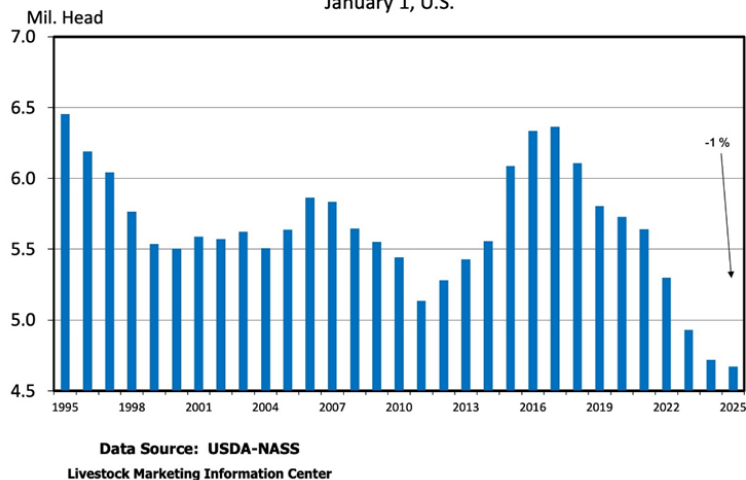
**JANUARY 1 TOTAL CATTLE INVENTORY**  
U.S., Annual



**JANUARY 1 COW INVENTORY**  
U.S., Annual



**HEIFERS HELD AS BEEF COW REPLACEMENTS**  
January 1, U.S.



beef replacements. But there was also an estimated increase in the heavy (> 500 lbs) steer and bull categories. I think this speaks to a gradual shift away from cows and towards growing operations in Kentucky.

**Andrew Griffith, University of Tennessee:**

I expected a larger decline in the beef cow herd and beef heifers held for replacement given the quantity of heifers that went on feed and the fact that cow slaughter was still a large number. Beef cow slaughter was certainly much lower in 2024 than in 2023, but beef cow slaughter in 2023 was extremely large. Thus, this was a little surprising to me. As far as state of Tennessee, I was surprised that the beef cow herd declined by 9,000 head while the number of heifers remained the same. Somehow, we maintained the same calf crop compared to last year despite having fewer cows. I do have some concerns about the survey response rate over time.

**Josh Maples, Mississippi State University:**

Total cattle inventory in Mississippi was unchanged at 810,000 head. The calf crop was also reported unchanged at 345,000 head. I was a little surprised the calf crop was not lower in Mississippi. The big adjustment this year was the change in data reported. Mississippi is one of the 19 states that were dropped (due to USDA-NASS budget cuts) from individual state reporting for important categories such as beef cows, replacements, etc. Producers were still surveyed, but their responses were aggregated into the total cattle number presented.

David Anderson, Texas A&M University: The beef cow herd increased about 60,000 head or 1.5% from January 1, 2024. But, this larger cow herd is the result of a downward revision to last year's cow herd. I often think it is helpful to look at the data over a longer period and doing so shows that the herd is smaller than 2 years ago. So, I don't think the report is too surprising thinking about it in that context. Fewer replacement heifers were retained according to the responses. The 4.075 million beef cows reported are the fewest since 1959 except for the 3.9 million in 2014 following the drought of 2010-2013.

## Follow the Basics to Maintain Yields and Manage Costs

*Dr. Edwin Ritchey, University of Kentucky UK Extension Soil Specialist*

*Dr. John Grove, University of Kentucky UK Agronomy/Soils Research & Extension*

**A**n economist was overheard saying that there were 5 ways to increase profits in any production system: cut costs, cut costs, cut costs, cut costs, and increase yields. This was somewhat a joke but has a solid underlying basis. Let's delve a little deeper into this strategy with some specific examples and practices to follow.

Yields are influenced by soil and weather conditions, soil pH and nutrient fertility status, and by pests (insects, diseases and weeds). The number one yield limiting factor for most Kentucky row crop producers is water, either too much or not enough. Water management is more of a long-term production decision regarding installation of irrigation and/or drainage systems that we will leave to the engineers.

Controlling insect, disease and weed pests is another management practice that can have a huge impact on final yield and profitability for any given year. For now, we will also assume producers are using good pest management strategies and following IPM practices/thresholds to make spray decisions.

As soil scientists, we'd like to discuss soil pH and nutrient availability. Both of these concerns can be addressed by proper soil sampling and testing. A standard soil probe is capable of making (or saving) a producer many dollars per acre when used correctly. A properly collected soil sample will provide a producer, or their consultant, with the current fertility status of the sampled fields. Knowing this for a field is paramount to knowing the right amount of lime, phosphorus, or potassium to add to that field, if any is actually needed. Remember that there are two ways to lose money in



your soil fertility program; adding something you don't need (wasted input costs) or not adding something that you do need (reduced yield due to poor soil fertility). Soil sampling and testing can help avoid both of these perils as you manage your soil fertility program.

A good soil sampling and testing routine should be the basis of any soil fertility program. The first

step is to properly identify the area of interest, typically no more than 10 to 20 acres in size (depending on field uniformity), sampling to 4 inches in no-till fields and 6 inches in tilled fields, and making sure to avoid anomalies within that area that might greatly affect test results.

Submit the samples to a lab with a good reputation that uses soil test procedures appropriate for soils of the of the area/region. Soil extractants are developed to provide an estimate/index of nutrient availability for crop use in the coming growing season. These extractants can vary with region as native soil conditions can vary considerably (e.g. acid, alkaline, saline, etc.). In Kentucky, we are best served by using the Mehlich 3 extractant that was developed for acid to neutral soils in the southeastern U.S.. There may be several soil test labs in the area that use the same extractant but be

aware that they might report results differently. The two most common reporting methods are lb nutrient/acre or ppm nutrient in the sample. The conversion between the two is simple, multiply ppm by 2 to convert to lb per acre, or divide lb per acre by 2 to get ppm. Make sure you understand the unit your chosen lab is using.

Spring soil samples will differ slightly from fall soil samples. For continuity of interpretation, be sure to collect soil samples at the same time of the year. This allows a producer to compare the historical soil samples with the current ones and make changes as necessary. Comparing the soil samples over time, along with good fertilizer application records, will allow the producer to make adjustments for individual fields as needed.

Once good soil samples are collected, and then analyzed in a good laboratory, the next thing is to evaluate the results for individual fields. Follow soil test recommendations for the individual field. Don't average soil test values across multiple fields – apply what is needed to the field that needs it. Generally, the best bang for the soil fertility buck is going to be soil pH management. Row crops perform best at a pH around 6.5. Maintaining a pH in this range optimizes availability of phosphorus and micronutrients, promotes good root growth and health and can positively influence the activity of certain herbicides.

How do you decide what nutrients or soil amendments should be added if the budget is limited? Liebig's Law of the Minimum is a good rule to remember when deciding which nutrient(s) to add. It states that crop yield is proportional

to the amount of the most limiting essential nutrient. In other words, the addition of a non-limiting nutrient will not maximize yield if the limiting nutrient is not addressed. Adding potassium to a phosphorus deficient soil will not remedy phosphorus deficiency or vice versa. Adding phosphorus to a soil with a pH of 5.3 is not going to be as effective for improving yield as liming the field and increasing the soil pH.

In very tight times with limited fertilizer budgets, rates might need to be cut in order to get several needed nutrients on the field. At what point is yield being lost due to a reduction in fertilizer additions? In these instances it would still pay to address soil pH. Work from The University of Tennessee showed that a half rate of limestone was almost as effective in neutralizing soil acidity as the full recommended rate - the benefit just didn't last as long. You can cut lime some, but acidity will eventually have to be addressed. Soil test values in the high range don't call for a fertilizer addition. Crops growing on soils testing in the 'medium' range are less likely to respond to fertilizer additions, especially when at the higher end of the medium range. The soils testing in the 'low' range for available nutrients are most likely to limit crop growth and are most likely to profitably respond to fertilizer

addition. These are the fields to address first, followed by fields testing in the low end of the medium range.

One thing to avoid is using a "miracle product" that claims to replace conventional fertilizers at a fraction of the cost and nutrient rate. There are plenty of products available that have remarkable claims about reducing overall soil fertility needs. Be skeptical of products with claims like, two quarts per acre replaces X pounds of dry fertilizer. A pound of fertilizer is a pound of fertilizer regardless of the form. For example, a gallon of ammonium polyphosphate (APP, 10-34-0) weighs about

11.7 lb and contains about 4 lb P<sub>2</sub>O<sub>5</sub>. To obtain 50 lb P<sub>2</sub>O<sub>5</sub>/acre using APP will require 146 lb or 12.5 gallons APP/acre. To get the same 50 lb P<sub>2</sub>O<sub>5</sub>/acre with DAP (18-46-0) requires 109 lb DAP/acre. This 50 lb P<sub>2</sub>O<sub>5</sub>/acre will not be replaced by a product at a use rate of 1-2 quarts per acre, regardless of their claims. Don't spend \$5 to \$20/acre on these types of products in hopes of replacing a proven lime or fertilizer product - the money is better spent on proven products.

Maybe the opening paragraph should read "make well informed decisions and don't waste money where it isn't needed" rather than

cut costs, cut costs, but that wasn't as catchy. We didn't really tell you anything special or new, we just promoted that you use good basic agronomic principles. Maintaining good yields and watching the budget comes down to following basic crop production principles. If you can manage costs wisely while maintaining good yield potential in your fields, then you are in a better position for the seasonal weather to give you a nice profit. Take good soil samples and submit them to a reputable lab using appropriate soil test procedures. Evaluate all fertilizer and lime recommendations carefully, with an eye towards controlling costs. Soil sample analysis cost ranges from \$0 (free) to about \$10 per sample. What other important management practices can be completed at such a low cost? Address soil pH when it falls below 6.0 to 6.2. Match fertility applications to soil sample recommendations. Don't average fertilizer rates over several fields - apply what is needed where needed. When budgets are tight, address low testing nutrients first, then those at the low end of the medium test range. The lower the soil test value the greater the chance for a profitable crop response. Don't spend money on miracle products that merely claim to replace proven fertilizer products - go with what works.

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-- 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.



# Manage Wildlife To Prevent Avian Influenza

Highly pathogenic avian influenza is a very contagious disease that kills domestic poultry. Wild birds such as ducks, gulls, and shorebirds can carry and spread avian influenza viruses without any signs of illness. To protect your poultry, keep wild birds away from your farm. Here are some simple steps you can take today:



## Secure Buildings

- Repair holes in buildings.
- Regularly check and repair damaged screens on windows and doors.
- Install netting or screens and use repellent gel or bird spikes to deter perching.
- Regularly inspect foam installation for signs of rodent or bird digging, chewing, or pecking.
- Wash away or remove old nests before each nesting season.\*
- Install decoys and scare devices and move them often so wildlife don't get used to them.

\* It is unlawful to remove nests with eggs or young birds in them.



## Manage Ponds and Basins

- Prune or remove plants from banks of manmade water structures.
- Use wire grids, predator decoys, and scare devices to keep waterfowl away from ponds or basins.
- Use fencing to separate natural ponds from the active area around barns.



## Reduce Food Resources

- Don't feed wildlife!
- Locate feed structures on a clean pad.
- Inspect pipes and connections regularly for leaks.
- Keep a broom and lidded garbage container at every feed storage area for quick cleanups.
- Reduce natural food sources by removing fallen fruit and mowing grass often.
- Don't pile used litter near barns.



## Cover Waste

- Keep carcasses and compost piles covered at all times.
- Always close and latch dumpster and trash can lids.



## Remove Standing Water

- Grade property to avoid pooling water. Fill or grade areas where water stands for more than 48 hours after a heavy rainfall.
- Don't walk or move equipment through or near standing water—this could track wildlife feces or other contaminants with the virus into your barns.
- Use French drains and culverts to carry water away from poultry houses.
- Never use untreated surface water for watering poultry or cleaning poultry barns and other facilities.

USDA and other experts recommend an integrated wildlife damage management approach. Some management methods that involve handling nests and eggs or the lethal removal of wildlife require specific expertise and authorizations. The lethal removal of native wildlife is regulated under Federal and State laws.



Need help managing wildlife on your farm? Call 1-866-4USDA-WS (1-866-487-3297).  
To learn more about how to protect your flock from HPAI and other diseases, scan the QR code.

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# Good Farm Management Starts with Good Records

**M**any producers don't like doing record keeping. Keeping up-to-date records can be time-consuming and sometimes boring, with having to sift through all your deposits and receipts and then input these into spreadsheets and creating income and cash flow statements. The reward is not always readily seen compared to other farming activities. If you have weeds in your field and you spray it with herbicide, the weeds die. If you feed your calves, they gain weight. Conversely, the benefits of record-keeping may not be seen for months, but it can be the difference between losing and making money.

Good records are the foundation of decision-making on the farm and should be used to inform your marketing, crop insurance, and loan choices. Any decision made on the farm has a financial impact that affects your revenue, costs, or both and, subsequently, your bottom line. Record keeping is important when things are tough as it allows you to evaluate areas of the farm that can be improved or where costs can be cut. The more detailed your records the more specific changes you can make. This will allow you to evaluate your farm as a whole, by specific crops, or even by specific fields, to determine where problems may arise. A detailed analysis could show that a field was unprofitable because it had some nutrient deficiencies or maybe the crop grown on that field needs to be re-evaluated. Or perhaps the terms of rental agreement is what is

causing that field to not be profitable. After diagnosing the issue, you can then determine how changes to this field will impact the farm's financial performance as a whole. In a tough year, this sort of evaluation is crucial to breaking-even or at least minimizing losses.

Record keeping is equally important when things are going well and to avoid overextending your farm financially. In a good year, the question that needs to be asked when making a large purchase, like equipment, is not "Can I afford this now?" but "Can I afford this over its lifetime?". There are many instances when high market prices encourage large purchases that set a farm up for failure when prices inevitably fall. If a purchase causes your break-evens to increase so that it is only profitable when prices are above average or high, then it is a risky investment.

Accurate record-keeping starts with accounting for all income and expense

transactions. For each income transaction, you should include: Date, Reference Number, Purchaser, Amount Deposited, and the Type of Income (Table 1). For expense transactions, the following should be included: Date, Check/Reference Number, Payee, Amount Paid, and the Type of Expense (Table 2). Having this information will ensure that each transaction is accurately recorded. The more detailed your record keeping, the more specific adjustments can be made.

There are programs that can help with record keeping, such as QuickBooks or Excel, or you can handwrite them. Any record-keeping is better than none. Many producers already have data on specific fields through yield maps, soil maps, etc. Using these along with your other records to make more specific evaluations and how these changes impact the farm's financial statements and ratios is key to long-term financial stability.

**Table 1. Cash Farm Income**

	1	2	3	4	5	6
	Date	Reference Number	Purchaser	Amount Deposited	Notes	Type of Income
1	08/01/24	1075	ABC Poultry Farm	\$4,800.00	1,200 bushels @ \$4.00/bu	Corn Sale
2	08/24/24	2082	XY Elevator	\$6,000.00	600 bushels @ \$10.00/bu	Soybean Sale
3	09/05/24	3070	Stockyard	\$3,366.00	22 calves (ave. 510 @ \$0.30 lb.)	Calves Sale
4	09/20/24	1081	Jim Smith	\$1,500.00	1 bull	Bull Sale
5						
<b>Total</b>				\$15,666.00		

**Table 2. Cash Farm Expenses**

	1	2	3	4	5	6
	Date	Check/Reference Number	Payee	Amount Paid	Notes	Type of Expense
1	8/12/2024	1107	John Doe	\$500.00	pay for 4/08-4/12	Contract Labor
2	8/16/2024	1108	Co-op	\$164.85	minerals-5 bags	Feed
3	8/23/2024	1109	Jane Doe	\$840.00	hay-20 bales	Feed
4	8/24/2024	Debit Card	Part's Store	\$101.72	supplies for fence repair	Supplies
5						
<b>Total</b>				\$1,606.57		

# Economic & Policy Update

E-newsletter Volume 25, Issue 1

Editors: Will Snell & Nicole Atherton

Source: Powers, L. "What should my CPA know that I am not telling them?" Economic and Policy Update (25):1, Department of Agricultural Economics, University of Kentucky, January 31, 2025.



Department of Agricultural Economics  
University of Kentucky



## What Should My CPA Know That I Am Not Telling Them?

Author: Laura Powers

As a new year begins, we cannot fully close out the previous year until income tax returns have been filed and paid. I'm not sure which meeting is looked upon less favorably... a visit to the tax office or a visit to the dentist. No offense to the dental profession intended. However, much like going to the dentist, an open and honest conversation is critical with the tax preparer to make sure the process is done cleanly and accurately and to minimize future discomfort.

If a farm has been in business for a few years, the farmer will have a general understanding of what the conversation will their tax preparer will be like. They will discuss crop and livestock sales, farm business expenses, and the recently purchased tractor or bull. The goal on both sides is to make sure the income tax payment accurately reflects the amount of tax due based on net farm income for the year. However, there may be some items of income or expense that may be inadvertently missed without a thorough conversation. Below are a few items that can easily be missed during the tax preparation process.

I traded equipment without cash down-payment. Rarely does a year go by that a farmer does not purchase or trade equipment. These equipment trades are an important subject to discuss with the tax preparer. Hopefully, the tax preparer has access to the farm's financial

information through a system supported by reconciled bank statements, such as computer software, spreadsheets, record books, or just a checkbook register. These systems provide a listing of farm transactions during the year. Most equipment purchases or trade-ins will appear on such statements because there will have been a payment made for either the full purchase price or a downpayment accompanied by a loan for the remainder. However, there are times that the only downpayment made is the piece (or pieces) of equipment traded in. The remainder due is financed. In this scenario, there will be no check to appear on a bank statement, thus nothing to note the transaction in the recordkeeping system. Still, the equipment purchase (and any trade-in) needs to be included in the tax return for the year the transaction occurred, and the new piece of equipment was placed in service.

I bought land with depreciable assets. Although land itself is not a depreciable asset, there could be assets included in a land purchase that could be depreciated. Barns, grain bins, ground tile, fencing, perhaps even lime or fertilizer applied in the previous year, could all have a basis assigned to them and thus depreciated and expensed over their appropriate life. Care must be given as to the allocation among the assets purchased. If an appraisal

was completed at the time of sale, it should list all the assets purchased and can be used as a guide in allocating basis.

My neighbor did custom work for me, and I gave her leftover soybean seed. Bartering transactions are common on farms. A neighboring farm may help you bale hay, and you may return the favor by giving them some remaining bags of soybean seed. Even though both parties agree that it is an even trade, there still should be a transaction in the farm records (and then on the tax return), reporting the Fair Market Value of the income and expense associated with the trade. In this example, there would be an added expense for the custom work done (hay baling) and a reduced seed expense (seed paid for but given to someone else). Such a transaction also helps on the farm management side of the business. If, in the above scenario, the farm gave away seed that they had purchased without also showing a reduction of the expense, then the total seed expense would be overstated.

My farm income will be higher (or lower) than normal next year. Most farmers pay taxes on a cash basis; meaning, within some parameters, they record income in the year it is collected and expenses in the year they are paid. Being a cash-based taxpayer allows farmers to try to balance taxable income from one year to the next, while not distorting

taxable income. While there is an inclination to want to defer as much income as possible to the following year, it may not always be best to do so. If there is a known (or at least a well-educated guess) that net income in the next year will differ substantially from net income in the current year, the tax preparer can employ certain tactics to help smooth net farm income between years. The tax preparer may discuss options such as depreciation choices, deferment of crop insurance, net operating loss elections, or treatment of CCC loans, for example that will not only impact the current tax year but can assist in planning for the future tax years.

I collected crop insurance last year that was deferred to this year. If a farmer receives a crop insurance payment because of yield loss and they normally defer the sale of that crop to the following year, they will have an option to also defer reporting that crop insurance income to the next year. If you have the same tax preparer as the previous year, then it is likely that deferment will be recorded in the software. However, if you have switched tax preparers for the year of deferment, then they need to be made aware of the crop insurance deferment. The IRS will know that it was deferred as it was reported as such on the previous year's return. Not reporting the income in the following year will likely result in receiving a letter from the IRS asking why you underreported income and asking for payment of not only additional tax, but penalties and interest as well.

I am retiring next year. As previously mentioned, farmers have the option to file taxes on a cash basis. Over the course of time, many farmers end up deferring income and prepaying expenses to manage their tax liability. Most of the time, that plan works reasonably well. That is until the farmer is ready to retire.

Farmers that have deferred income and have prepaid expenses (and fully depreciated equipment purchases) for several consecutive years can potentially create a substantial tax issue for the first year of retirement. Without planning, a farmer could find themselves having a full years' worth of income (or more), but very few expenses to offset that income. Not to mention that they may also be selling equipment the year after retirement, further increasing taxable income. Talking with your tax preparer at least three to four years before retirement can aid in managing the tax issues that may arise when closing out the farm business.

There is a well-known adage that reminds us that one of the two certainties of life is paying taxes. Paying taxes can be a good thing, especially when you consider that taxes are only owed when there is positive income, and farming is supposed to be a for-profit venture. Farmers are fortunate in the fact that they have many options available to manage their tax liability, within reason. The tax preparer should be considered a member of the farm advisory team. Having an open dialog with their tax preparer both before year end and at preparation time will allow both parties the ability to consider all options and make the process flow smoothly from one year to the next.

## HOW YOUR \$10 AG TAG BUILDS BOUNDLESS FUTURES



### KENTUCKY FFA

Provides travel scholarships for students and chapters competing at the **National FFA Convention**.

Offers grant opportunities for local chapters to enhance **classrooms and communities**.

### KENTUCKY 4-H

Creates hands-on learning experiences, builds friendships, and fosters growth through **4-H Camp**.

Supports **skill development** through judging activities, 3-D design, and community projects.

### 100% TO AG

100% of Ag Tag funds are evenly split between Kentucky 4-H, Kentucky FFA, and Kentucky Proud.

Half of the funds for 4-H and FFA are returned to the originating counties.

### KENTUCKY PROUD

Funds **scholarships** for programs like Athletes in Agriculture.

Makes events like the **Kentucky State Fair and North American International Livestock Exposition** possible.

# Economic & Policy Update

E-newsletter Volume 25, Issue 1

Editors: Will Snell & Nicole Atherton



Department of Agricultural Economics  
University of Kentucky



## You May See a New 1099 Form in Your Mailbox

Author: Jerry Pierce

**F**armers may begin receiving a new income-reporting Form 1099-K, Payment Card and Third Party Network Transactions. It reports gross payments to you for goods or services made through credit card, gift or debit card, and on-line payment services. These Third Party Settlement Organizations (TPSO) take payment from customers for you. This includes things like Venmo and PayPal.

For 2024, these TPSOs are required to issue a 1099-K if total payments to you exceed \$5,000, but they may send one even if the payments are less. For 2025, the amount is \$2,500, and by 2026 the threshold falls to \$600, like most other Form 1099s. The lower threshold will result in a lot more 1099-Ks being issued to many more taxpayers.

Currently, these kinds of farm transactions are used commonly for direct sales to customers. Think farmers' markets, on-farm retail markets, roadside stands, online sales, nurseries, wineries, and agritourism operations. But they are also being used for sales of hay and livestock.

**What to report:** Report the full amount of gross payments from Form 1099-K. Use your records to verify accuracy and proper reporting of gross payments on your tax return.

Generally, payments from family and friends will not be reported on Form 1099-K, but the purpose of payments isn't always clear. You may have to ask the TPSO to send a corrected 1099-K to remove non-farm income. You should set up a separate business account with the TPSO for receiving farm income and a personal account for non-farm income to keep the payments separate.

If the transactions are for farm income you should deduct fees, credits, refunds, and shipping costs charged by the credit card company or TPSO as farm expenses.

**Where to report:** Report gross payments as you would income from other forms of payment. Report payment for farm-related sales, custom work income, and miscellaneous farm income on Schedule F (Form 1040). Report gross payments for sales of farm equipment and breeding livestock on Form 4797. Rent will generally be reported on Schedule E (Form 1040).

Do not subtract expenses from the amount reported on Form 1099-K. The IRS will be looking for the gross payments reported on your return. Include them in expenses on the appropriate return.

Report sales of personal items, like autos and appliances, and sales and services from a hobby, on Form 1040.

Third-party networks will require you to complete a Form W-9 with your Employer ID Number or Social Security Number for reporting purposes so they can report to the IRS. Failure to do so may result in backup withholding of 28% of gross payments, and possibly loss of the service.

For more information see Understanding your Form 1099-K at <https://www.irs.gov/businesses/understanding-your-form-1099-k>.

See also the Tax Topic Form 1099 Information Returns at <https://extension.usu.edu/ruraltax/>.

**Source:**

Pierce, J. "You May See a New 1099 Form in Your Mailbox." Economic and Policy Update (25):1, Department of Agricultural Economics, University of Kentucky, January 31, 2025.





# Producers: You Can Prevent the Spread of Highly Pathogenic Avian Influenza

Highly pathogenic avian influenza (HPAI) is an extremely contagious respiratory disease of birds that can kill domestic poultry. You can protect your birds from HPAI – and other diseases – with biosecurity. Simply put, biosecurity refers to everything people do to keep diseases – and the viruses, bacteria, fungi, parasites, and other microorganisms that cause disease – away from animals, property, and people.

## Need Funds to Improve Biosecurity on Your Farm? Apply for a USDA Farm Loan

USDA's Farm Service Agency (FSA) offers direct and guaranteed loans to farmers and ranchers to start, expand, or maintain a family farm. Poultry producers can use these loans to implement biosecurity measures in their operations.

### Scan the QR code now to:

- Learn about USDA's farm loan program
- Find your local USDA Service Center
- Use the Loan Assistance Tool ([lat.fpac.usda.gov](http://lat.fpac.usda.gov)) to check your eligibility for FSA loans
- Discover FSA loan types
- Learn about FSA loan requirements



## Protect Your Birds With a Few Simple Steps

The steps below are examples of good biosecurity measures you can take to reduce the spread of diseases, such as HPAI. You can apply for a FSA loan to help implement many of these measures.



Use proper disinfection methods, especially when moving between new poultry facilities. Buy birds from reputable sources and follow isolation protocols.



Limit visitors by posting signage or installing a farm entrance gate. Ensure visitors practice good biosecurity, such as hand washing, and wearing boot covers.



Limit exposure to wild birds and pests by cleaning up feed spills immediately and developing a wild bird management plan. Call USDA at 1-866-487-3297 for help.



Create a site-specific biosecurity plan. Provide regular training and ensure biosecurity processes are followed.



Learn more about stopping avian influenza: [aphis.usda.gov/animalhealth/defendtheflock](http://aphis.usda.gov/animalhealth/defendtheflock)

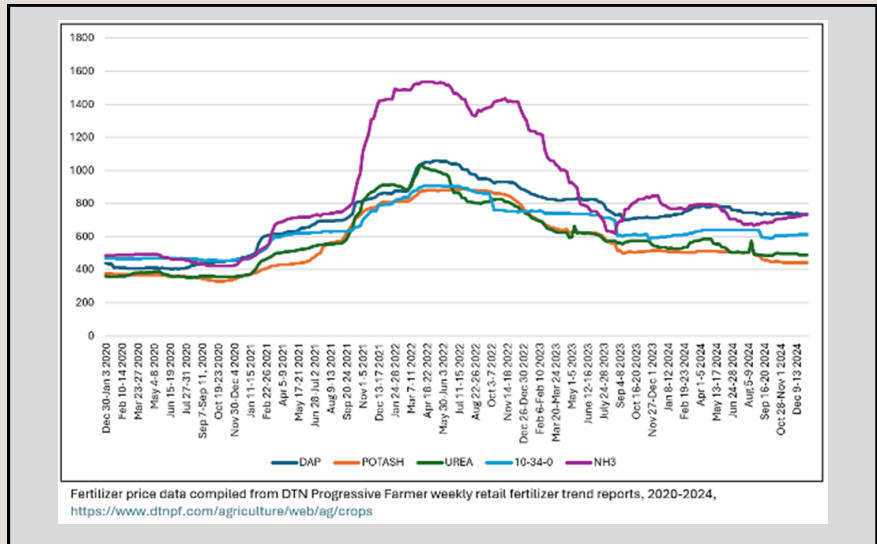
USDA is an equal opportunity provider, employer, and lender. March 2024 | APHIS-24-017

# Fertilizer Prices: What Can We Expect in 2025?

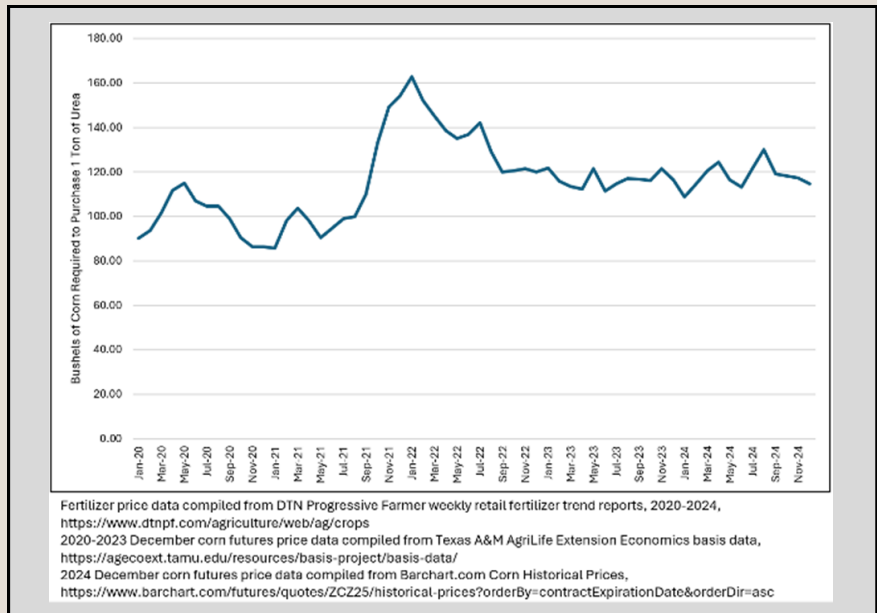
Over the last few years, producers have been challenged to balance decreasing commodity prices against high input costs. One of the major factors contributing to this challenge has been above-average fertilizer prices. In 2021 and 2022, a combination of increased demand for fertilizer and disruptions to fertilizer production and supply caused prices to double or, in the case of anhydrous ammonia (NH<sub>3</sub>), triple in a few months (**Figure 1**), reaching record highs. The good news is that nominal fertilizer prices decreased throughout 2023 and 2024 as these shocks were largely corrected. In the first half of 2023, prices decreased by 20%-40%, depending on the product, from their 2022 highs. Prices largely declined in 2024 until the last quarter of the year. Since then, prices for most fertilizer products have either remained stable or increased.

Of course, the cost of fertilizer depends not only on the price of fertilizer but also on the price of the commodity the fertilizer is used to grow. It's much easier for producers to purchase fertilizer when they can sell corn for \$7/bushel, as opposed to \$4/bushel, regardless of the nominal fertilizer price. Figures 2 and 3 illustrate the price of urea relative to corn and cotton prices for the years 2020-2024. Fertilizer prices used to calculate these ratios come from DTN Progressive Farmer's weekly average fertilizer price updates. Cotton and corn prices use the weekly closing price for the nearby December contract as reported in Texas A&M AgriLife Extension Economics Basis Data and by Barchart.com.

**Figure 2** illustrates the total bushels of corn required to purchase one ton of urea in each



**Figure 1. Weekly Retail Prices for Selected Fertilizer Products, 2020-2024**



**Figure 2. Monthly Urea-Corn Price Ratio, 2020-2024**

month of the series. **Figure 3** shows the total pounds of cotton lint required to purchase one ton of urea each month. From January 2020 until August 2021, producers needed an average of 98.02 bushels of corn or 577.80 pounds of cotton lint to purchase 1 ton of urea. From September 2021 through December 2022, when fertilizer prices reached their highest levels, one ton of urea cost an average of 135.72 bushels of corn or 836.61 pounds of cotton

lint. From January 2023 through December 2024, as fertilizer prices fell, one ton of urea was worth 117.40 bushels of corn or 719.26 pounds of cotton lint on average. Now, what about relative fertilizer prices in 2025? For the week of January 13-17, DTN Progressive Farmer reported an average price of \$492/ton of urea. During that same week, the average price for the Dec '25 corn contract was \$4.56/bushel, and the average price for

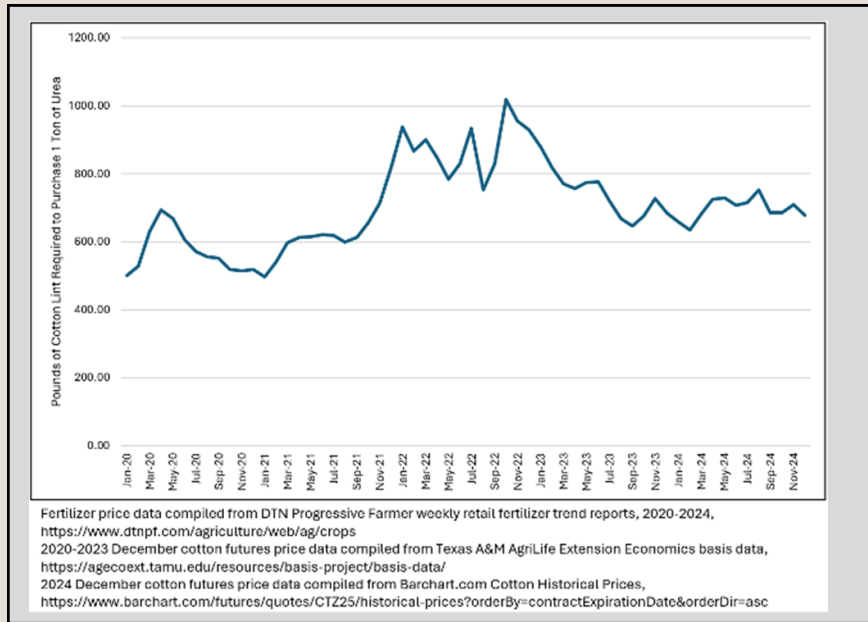


Figure 3. Monthly Urea-Cotton Price Ratio, 2020-2024

the Dec '25 cotton contract was \$0.69/pound, according to Barchart.com. This gives us a urea-corn price ratio of 107.92 bushels/ton and a urea-cotton ratio of 711.25 pounds/ton. To put these values into perspective, this urea-corn ratio is similar to the June 2020 ratio and about 0.83 bushels/

ton less than in January 2024. The urea-cotton ratio, on the other hand, is about 52.32 pounds/ton higher than in January 2024, and similar to June and July of last year.

Currently, fertilizer is slightly cheaper relative to corn prices and slightly more expensive relative to cotton prices when compared to a

year ago. Looking forward, nominal fertilizer prices have been mostly stable since July of last year. Should this trend continue, changes in relative fertilizer prices this year will depend on how farm commodity prices change.



**Sources:**

Corn Historical Prices. Barchart.com, <https://www.barchart.com/futures/quotes/ZCZ25/historical-prices?orderBy=contractExpirationDate&orderDir=asc>.

Cotton #2 Historical Prices. Barchart.com, <https://www.barchart.com/futures/quotes/CTZ25/historical-prices?orderBy=contractExpirationDate&orderDir=asc>.

DTN Retail Fertilizer Trends. DTN Progressive Farmer, <https://www.dtnpf.com/agriculture/web/ag/crops>.

Texas A&M AgriLife Extension Agricultural Economics Basis Data, <https://agecoext.tamu.edu/resources/basis-project/basis-data>.

Wright, Andrew. "Fertilizer Prices: What Can We Expect in 2025?" Southern Ag Today

## It's tax season. Be prepared with these tips

Source: Nichole Huff, extension specialist for family resource management

**T**his is the time of year when we start thinking about filing our income taxes. Even though it's an annual event, it can cause anxiety for many. By preparing now, you can ease the process for yourself or your tax preparer.

Begin by gathering the necessary forms including your social security number and that of your spouse if filing jointly, plus the numbers of any dependents. In addition to W-2 forms, you want to include information about any taxable interest you earned from savings accounts, stocks, mutual funds and virtual currency transactions. You will need to gather other 1099 forms from any earned compensation, including unemployment compensation, pension distributions, annuity or retirement plans, or contract employment.

Additionally, have a copy of last year's federal and state tax returns accessible, and your bank account and routing number to receive any refunds by direct deposit. Depending on your circumstances, you may need to include Form 1095-A, Health Insurance Marketplace Statement, if anyone in your household enrolled in a Marketplace plan in 2024.

One of the largest deductions many people can claim is mortgage interest. If you have a mortgage, you should have a 1098 form from your lender specifying how much interest you paid in the last



If

year. Mortgage interest and points may be tax deductible if you itemize. Learn more at <https://www.irs.gov/taxtopics/tc505>.

If you expect a refund, different factors may impact when you receive your return. The IRS issues most direct deposit refunds within 21 days, however, certain factors may affect refund timing. Returns that require additional review can take longer, as well as paper returns (i.e., a mailed check). Claims involving tax credits that need verification may delay processing times. Further, incomplete information, errors, or missing documentation, like W-2 and 1099 forms, may cause delays.

To receive your refund quickly, electronically file your taxes as early as possible and choose the direct deposit option.

you owe the IRS money this year, you may want to consider changing your withholding status with your employer moving forward. This will allow the employer to withhold more money from your check throughout the year, so you're not hit with a big payment next year.

For general information on filing taxes this year, visit <https://www.irs.gov/individuals/get-ready-to-file-your-taxes>.

If you have questions about whether certain tax laws apply to your individual circumstances, consider using the IRS Interactive Tax Assistant tool at <https://www.irs.gov/help/ita>. This free online tool can help you determine if you need to file a tax return, your filing status, if you can claim a dependent, if your income is taxable, tax credit eligibility, or if you can deduct certain expenses.



## Information about the Kentucky State University Cooperative Extension Program



### Canned Food Preparedness

February is National Canned Food Safety month. NIFA provides funding to the Supplemental Nutrition

Education Program - Education (SNAP-ED) and Expanded Food and Nutrition Education Program (EFNEP). It is important to understand food safety when winter storms are likely. See the information below regarding canned food safety and the federally funded programs aimed at helping families obtain nutritional foods.

### Canned Food Safety - Botulism Causes

- A rare but serious illness caused by a toxin that attacks the body's nerves. This can be caused from consuming cans that are spoiled and/or improperly stored.
- You cannot see, smell, or taste the toxin, but taking even a small bite of food containing it can be deadly.
- Symptoms: difficulty breathing, muscle paralysis, and even death.

### Use the Correct Equipment

- Use USDA's proper canning techniques when canning fruits/vegetables.
- Low-acid foods are the most common sources of botulism in home canning.
  - **Examples:** asparagus, green beans, beets, corn, potatoes, some figs and tomatoes, milk, all meats, fish, and other seafood
- Signs of contamination: the container is leaking, bulging, swollen, damaged, cracked, or spurs liquid/foam when opened; the food is discolored, moldy, or smells bad.

### Water and Appliances

- Do not use a boiling water canner for low-acid foods. It will not protect against botulism.
- Do not use an electric, multi-cooker appliance, even if it has a "canning" or "steam canning" button on the front panel.



### Federally Funded Programs:

#### SNAP-Ed:

NIFA's involvement with SNAP-Ed began in 1999, as Land Grant University administrators identified the need for national leadership through their federal partner.

NIFA supports SNAP-Ed by promoting well-trained staff; effective program planning, identification and use of effective and appropriate resources; and improved consistency and clarity of communication among SNAP-Ed's many partners.

#### Expanded Food and Nutrition Education Program (EFNEP):

EFNEP is a Federal Extension (community outreach) program that currently operates through the 1862 and 1890 Land Grant Universities in every state

EFNEP uses education to support participants' efforts toward self-sufficiency, nutritional health and well-being.

#### Program Impacts:

The Plan. Eat. Move. Program through the University of Kentucky encompasses SNAP-Ed and EFNEP.

This program will show individuals how to plan nutritious meals on a limited budget, acquire safe food handling practices, improve food preparation skills, and change behaviors necessary to have a healthy lifestyle.

Plan. Eat. Move. provides resources surrounding healthy eating, adapting physically activity and numerous recipes.

#### Source:

- <https://www.nifa.usda.gov/about-nifa/blogs/national-canned-food-month> - <https://www.cdc.gov/foodsafety/communication/home-canning-and-botulism.html>



## DISASTER ASSISTANCE

### ELAP - LIVESTOCK ASSISTANCE

#### Emergency Assistance for Livestock, Honeybees and Farm-Raised Fish Program

#### Overview

The Agriculture Improvement Act of 2018 (the 2018 Farm Bill) amended the 2014 Farm Bill which authorized the Emergency Assistance for Livestock, Honeybees and Farm-Raised Fish Program (ELAP). ELAP provides emergency assistance to eligible producers of livestock, honeybees and farm-raised fish. It covers losses due to an eligible adverse weather or loss condition, including blizzards, disease (including cattle tick fever), water shortages and wildfires, as determined by the Secretary. ELAP covers losses that are not covered under other disaster assistance programs such as the Noninsured Crop Disaster Assistance Program, Livestock Forage Disaster Program (LFP) and the Livestock Indemnity Program (LIP). The 2018 Farm Bill, enacted Dec. 20, 2018, amended certain provisions related to ELAP effective with the 2019 program year.

#### Those amendments included:

- providing reimbursement of 90 percent of the cost of losses for socially disadvantaged, limited resource, or beginning or veteran farmer or rancher.
- removing ELAP from the combined ELAP and LFP maximum per person and legal entity payment limitation for the 2019 and subsequent program years (as discussed in this fact sheet)
- in addition to covering the cost related to gathering livestock to treat for cattle tick fever, ELAP will now cover the cost related to



gathering livestock to inspect for cattle tick fever;

- no longer covering livestock death losses due to diseases that are caused or transmitted by a vector and are not controlled by vaccination or an acceptable management practice. The 2018 Farm Bill authorizes these diseases to be covered under LIP.
- ELAP is administered by the Farm Service Agency (FSA) of the U.S. Department of Agriculture (USDA).

#### Policy Enhancement

In response to ongoing drought conditions across the U.S., USDA expanded ELAP to help drought-stricken ranchers cover above normal costs of hauling water and feed or hauling livestock to forage or other feeding location. ELAP livestock and feed hauling assistance was retroactive for 2021 and is available for losses in subsequent years.

#### How it Works

There are five categories of livestock losses covered by ELAP, described in greater detail within this fact sheet:

- Grazing losses that are not due to drought or wildfires on federally managed lands;

- Livestock feed losses caused by eligible loss condition that result in purchased or mechanically harvested feed being destroyed, additional feed purchased above normal, and additional cost of feed delivery;
- Losses resulting from the additional cost of transporting water to livestock due to an eligible drought;
- Losses resulting from above normal costs of hauling feed to livestock due to an eligible drought;
- Losses resulting from above normal costs of hauling livestock to forage or other feeding location and back due to an eligible drought; and
- Losses resulting from the additional cost associated with gathering livestock for treatment and inspection related to cattle tick fever.



#### What Is Eligible?

##### Livestock Feed and Grazing Losses

##### Eligible Livestock

For livestock feed and grazing losses, livestock must be:

- Grazing animals that are weaned, such as alpacas, adult or non-adult

- dairy cattle, adult or non-adult beef cattle, adult or non-adult buffalo, adult or non-adult beefalo, deer, elk, emus, equine, goats, llamas, ostriches, reindeer, sheep, and adult or non-adult water buffalo;
- Livestock that would normally have been grazing the eligible grazing land or pastureland during the normal grazing period for the specific pasture type of grazing land or pastureland in the county where the eligible adverse weather or loss condition occurred;
- Owned, cash-leased, purchased, under contract for purchase or been raised by a contract grower or an eligible livestock producer, during the 60 calendar days prior to the beginning date of the eligible adverse weather or loss condition; and
- Maintained for commercial use as part of the producer's farming operation on the beginning date of the eligible adverse weather or loss condition.

### Eligible Producer

An eligible producer is a person or legal entity who, in addition to satisfying other payment eligibility requirements, is an owner or contract grower of livestock that shares in the livestock or the risk of producing the livestock who:

- During the 60 calendar days before the beginning date of the eligible adverse weather or loss condition, owned, cash-leased, purchased, entered into a contract to purchase or been a contract grower of eligible livestock;
- Suffered a loss on land that is either:
  - Native or improved pastureland with a permanent vegetative cover; or

- Planted to a crop specifically for the purpose of providing grazing for covered livestock; and
- Provided pastureland or grazing land during the normal grazing period to eligible livestock, including cash-leased pastureland or grazing land for livestock that is physically located in the county where the eligible adverse weather or loss condition occurred during the normal grazing period.

### Eligible Adverse Weather or Loss Condition

Eligible adverse weather or loss conditions for livestock feed and grazing losses include, but are not limited to:

- Blizzards
- Eligible Drought (Increased Transportation Costs)
- Eligible Winter Storm
- Excessive wind
- Floods
- Hail (Grazing Loss Only)
- Hurricane
- Lightning
- Tidal Surge
- Tornado
- Volcanic Eruption
- Wildfire on non-federal land

Drought and wildfire on federally managed land are not eligible adverse weather or loss conditions for livestock feed and grazing losses under ELAP. These conditions are covered by LFP.

### Eligible Grazing Losses

Eligible grazing losses must be incurred on eligible grazing lands physically located in the county where the eligible adverse weather or loss condition occurred and because of an eligible adverse weather or loss condition. The daily livestock payment rates per head for

eligible livestock grazing losses for 2024 is \$1.75211.

### Eligible Feed Losses

Eligible feed losses under ELAP are losses:

- Of purchased forage or feedstuffs;
- Of mechanically harvested forage or feedstuffs;
- Resulting from the additional costs incurred for feed delivery to eligible livestock because of an eligible adverse weather or loss condition; and
- Resulting from the additional costs of purchasing additional feed, above normal quantities, required to maintain eligible livestock during an eligible adverse weather or loss condition, until additional livestock feed becomes available.

Eligible feed losses must not exceed 150 days of lost feed.

### Eligible Transportation Losses

To be eligible for ELAP assistance, livestock must be intended for grazing in a county suffering an eligible drought and producers must have incurred feed or livestock transportation costs on or after Jan. 1, 2024. Although producers will self-certify losses and expenses to FSA, producers are encouraged to maintain good records and retain receipts and related documentation in the event these documents are requested for review by the local FSA County Committee.

*(continued on page 22)*

## Grazing Loss Payments, Excluding Wildfire on Non-Federal Land

Payments for eligible grazing losses, except grazing losses due to wildfires on non-federal land, will be calculated based on a minimum of 60 percent of the lesser of the total value of:

- The feed cost for all covered livestock owned by the eligible livestock producer based on the number of grazing days lost, not to exceed 150 days of daily feed cost for all covered livestock; or
- Grazing lost for eligible livestock based on the normal carrying capacity of the eligible grazing land of the eligible livestock producer for the number of grazing days lost, not to exceed 150 days of lost grazing.

Payments for eligible livestock producers for losses suffered because of a wildfire on non-federal land will be calculated based on a minimum of 60 percent of:

- The result of dividing the number of acres of grazing land or pastureland acres affected by the wildfire by the normal carrying capacity of the specific type of eligible grazing land or pastureland, multiplied by;
- The daily value of grazing multiplied by;
- The number of days grazing was lost due to the wildfire, not to exceed 180 calendar days.

## Livestock Feed Payment Calculations

Payment calculations for feed losses will be based on a minimum of 60 percent of the producer's actual cost for:

- Livestock feed that was purchased or mechanically harvested forage or feedstuffs intended for use as

feed for the producer's eligible livestock that was physically damaged or destroyed due to an eligible adverse weather or loss condition;

- The additional costs incurred for transporting livestock feed to eligible livestock due to an eligible adverse weather or loss condition; and
- The additional cost of purchasing additional livestock feed above normal to maintain the eligible livestock during an eligible adverse weather or loss condition until additional livestock feed becomes available.

FSA will calculate ELAP payments for an eligible livestock producer for livestock feed and grazing losses for no more than 150 calendar days.

## Livestock Transportation Payment Calculations

USDA will reimburse eligible ranchers 60% of livestock transportation costs above what would have been incurred in a normal year. Producers qualifying as underserved (socially disadvantaged, limited resource, beginning or military veteran) will be reimbursed for 90% of the feed transportation cost above what would have been incurred in a normal year.

USDA uses a national cost formula to determine reimbursement costs that will not include the first 25 miles and distances exceeding 1,000 transportation miles. The calculation will also exclude the normal cost to transport hay or feed if the producer normally purchases some feed or normally transports livestock. For 2024, the initial cost formula of \$6.60 per mile will be used (before the percentage is applied).

## Losses Resulting from Additional Cost of Transporting Water Eligible Livestock

- For losses resulting from the additional cost of transporting water, eligible livestock must be:
- Alpacas, adult or non-adult dairy cattle, adult or non-adult beef cattle, adult or non-adult buffalo, adult or non-adult beefalo, deer, elk, emus, equine, goats, llamas, ostriches, reindeer, sheep, and adult or non-adult water buffalo;
- Owned, cash-leased, purchased, under contract for purchase or been raised by a contract grower or an eligible livestock producer, during the 60 calendar days prior to the beginning date of the eligible adverse weather or loss condition;
- Livestock that are grazing eligible pastureland or grazing land during the normal grazing period for the specific pasture type of grazing land or pastureland that:
  - Are physically located in the county where the eligible adverse weather or loss condition occurred;
  - Had adequate livestock watering systems or facilities before the eligible adverse weather or loss condition occurred; and
  - Do not normally require the transport of water by the producer; and
- Maintained for commercial use as part of the producer's farming operation on the beginning date of the eligible adverse weather or loss condition.

Livestock that were or would have been in a feedlot are not eligible for livestock losses resulting from transporting water under ELAP.



## Eligible Producer

For losses resulting from transporting water, producers must have, during the 60 calendar days before the beginning date of the eligible adverse weather or loss condition, owned, cash-leased, purchased, entered into a contract to purchase or been a contract grower of eligible livestock.

## Payments for Losses from Transporting Water

Payments for losses due to transporting water will be based on a minimum of 60 percent of the lesser of:

- The total value of the cost to transport water to eligible livestock for 150 days, based on the daily water requirements for the eligible livestock; or
- The total value of the cost to transport water to eligible livestock for the program year, based on the actual number of gallons of water the eligible producer transported to eligible livestock for the program year.

The national average average price to transport a gallon of water is \$0.10 for 2024 program year. A state or regional price may be established based on the recommendation and documentation by the FSA State Committee.

## Eligible Adverse Weather or Loss Condition

Eligible adverse weather for losses resulting from the additional cost of transporting water to eligible livestock includes an eligible drought, meaning that any area of the county has been rated by the U.S. Drought Monitor as having a D3 (extreme drought) intensity that directly impacts water availability at any time during the normal grazing period.

Eligible Losses from Transporting Water Eligible losses due to the additional costs of transporting water under ELAP are losses that:

- Are due to an eligible drought;
- Are for the additional cost of transporting water to eligible livestock, including, but not limited to, costs associated with water transport equipment fees, labor and contracted water transportation fees; and
- Do not include the cost of the water itself.

## Losses Related to Treatment and Inspection for Cattle Tick Fever

### Eligible Livestock

For losses resulting from the additional cost to treat and/or inspect for cattle tick fever, eligible livestock must be:

Adult or non-adult dairy cattle, adult or non-adult beef cattle, adult or non-adult buffalo, adult or non-adult beefalo and adult or non-adult water buffalo;

Owned, cash-leased, purchased, under contract for purchase or been raised by a contract grower or an eligible livestock producer, during the 60 calendar days prior to the beginning date of the eligible adverse weather or loss condition; and

Maintained for commercial use as part of the producer's farming operation on the beginning date of the eligible adverse weather or loss condition.

Livestock that were or would have been in a feedlot are not eligible for livestock losses resulting from the additional cost to treat for cattle tick fever under ELAP.

Eligible losses include those losses resulting from the additional cost



associated with gathering livestock to treat and/or inspect for cattle tick fever. To be considered an eligible loss, acceptable records that provide the number of livestock treated and/or inspected for cattle tick fever and the number of treatments given during the program year must be on file with the USDA Animal and Plant Health Inspection Service (APHIS).

Payments for Losses for Gathering Livestock to Treat and/or Inspect for Cattle Tick Fever

Payments for losses resulting from the additional cost associated with gathering livestock to treat and/or inspect for cattle tick fever will be equal to the sum of the following for each treatment:

- A minimum national payment factor of 60 percent multiplied by;
- The number of eligible livestock treated and/or inspected by APHIS for cattle tick fever, multiplied by;
- The average cost to gather livestock, per head, as established by FSA.

## Socially Disadvantaged, Limited Resource, Beginning, or Veteran Farmers and Ranchers

With respect to the national payment rates referenced above, an eligible livestock producer who certifies they are socially disadvantaged, limited resource or a beginning or veteran farmer or rancher will receive 90 percent of the payment rate for livestock losses under ELAP.

**(continued on page 25)**

# Two Key Productivity Measures with Profit Implications for Cow-Calf Operators

By Kenny Burdine, University of Kentucky



## *Weaning rate, pounds of weaned calf per cow are two very important measures.*

**A**s we open the final month of the year, most spring-calving cow-calf operations have weaned calves and have an opportunity to assess the productivity and profitability of their herds. To that end, I wanted to quickly review two measures that I feel are of utmost importance to a cow-calf operator. Neither measure carries a dollar sign, but both have serious implications for the revenue side of the profit equation. There is no shortage of measures and indices that can be helpful for cow-calf operators, but weaning rate and pounds of weaned calf per cow are two very important, but also relatively simple to understand and calculate.

Weaning rate is the percentage of cows exposed to a bull that wean a calf in a given year. If a farmer exposed 50 cows and weaned 45 calves, the weaning rate for that operation would be 90% (45 calves divided by 50 cows). There is a cost to maintaining and breeding cows

whether they wean a calf or not, so limiting the number of cows that incur costs and fail to wean a calf is crucial. Holding all other things constant, herds with higher weaning rates will be more profitable than

those with lower weaning rates. If weaning rate is an issue, farmers should work to determine if the issue is cows failing to breed, cows losing calves, or calf survival.

An easy way to think about weaning rate is that it converts revenue per calf to revenue per cow. **Table 1** below provides a simple way to

difference expands in stronger calf markets and contracts in weaker calf markets, but the fact that weaning rate significantly impacts profit is undeniable.

The second measure briefly worth discussing is pounds of weaned calf per cow. This measure builds upon weaning rate by also including weaning weights. Pounds of weaned calf per cow can be calculated by dividing the total number of weaned pounds by the number of cows exposed to a bull or by multiplying the average weaning weight for the operation by the weaning rate. I like to think of pounds of weaned calf per cow much like a yield measure for a crop operation – production per unit. Weaned pounds are the production level and cows are the unit. So, this measures the pounds of weaned calf a cow-calf producer

**Table 1: Revenue per Cow as Weaning Rate Changes**

Assuming 550 lb calves @ \$2.30: \$1,265 per calf weaned	
Weaning Rate	Revenue per Cow
95%	\$1,202.75
90%	\$1,138.50
85%	\$1,075.25
80%	\$1,012.00
75%	\$948.75

illustrate this concept. If one assumes that an average calf is weaned at 550 lbs. and is worth \$2.30/lb. (for simplicity think steer-heifer average), then the value of each calf is \$1,265 at weaning. However, when this is discounted for cows that were maintained but did not wean a calf, the revenue picture on a per cow basis is very different. Each 5% change in weaning rate impacts revenue per cow by more than \$60. That

can potentially sell for every cow maintained.

**Table 2** shows pounds of weaned calf per cow for a range of weaning rates and weaning weights. Increasing the percentage of cows that wean a calf each year and/or increasing the weaning weight of calves are two of the primary ways that cow-calf operations can see increased revenues, with calf price being an important third factor. The wide range across the table speaks

to how much this measure can vary across operations. This is not to say that a higher level of pounds of weaned calf per cow is always desirable because this measure does not incorporate any additional costs associated with higher weaning weights or other considerations of the operation. But, tracking and managing that number will have profit implications for the operation over time.

**Table 2: Pounds of Weaned Calf per Cow by Weaning Weight and Weaning Rate**

Weaning Rate	Average Weaning Weight				
	400 lbs	450 lbs	500 lbs	550 lbs	600 lbs
95%	380	427.5	475	522.5	570
90%	360	405	450	495	540
85%	340	382.5	425	467.5	510
80%	320	360	400	440	480
75%	300	337.5	375	412.5	450



(continued from page 23)

### Payment Limitations

The 2018 Farm Bill removed ELAP from the combined \$125,000 payment limitation under ELAP and LFP. Therefore, for 2019 and subsequent program years, payment limitation does not apply to ELAP benefits. The average adjusted gross income (AGI) limitation on payments for persons or legal entities, excluding joint ventures and general partnerships, with certain levels of average AGI will apply. Specifically, a person or legal entity with an average AGI (as defined in 7 CFR Part 1400) that exceeds \$900,000 will not be eligible to receive ELAP payments.

Direct attribution provisions also apply to ELAP. Under direct attribution, any payment to a legal entity will also be considered for payment limitation purposes to be a payment to persons or legal entities with an interest in the legal entity or in a sub-entity. For more information on payment limitations, visit [fsa.usda.gov/limits](https://fsa.usda.gov/limits).

### How to Apply

Producers can apply to receive ELAP assistance at local FSA service centers. The ELAP application period ends Dec. 31 of each calendar year. In addition to submitting an application for payment, producers who suffered livestock losses should submit a notice of loss to the local FSA office that maintains their farm records.

The following table provides the final dates to file a notice of loss and application for payment for livestock losses.

The producer must include a copy of the grower contract if they are a contract grower and any other supporting documents required for determining eligibility. Supporting

documents must show evidence of loss, current physical location of livestock in inventory and evidence that grazing land or pastureland is owned or leased.

FSA will use data furnished by the applicant to determine eligibility for program benefits. Furnishing the data is voluntary; however, without all required data, program benefits will not be approved or provided.

### More Information

This fact sheet is for informational purposes only; other restrictions may apply. For more information about ELAP, visit [fsa.usda.gov/ELAP](https://fsa.usda.gov/ELAP) or contact your local FSA office. To find your local FSA office, visit [farmers.gov](https://farmers.gov).

Date of Livestock Loss	Final Date to File Notice of Loss	Final Date to Submit an Application for Payment
Within the program year Jan. 1 – Dec. 31	Jan 30 after the program year in which the loss occurred.	Jan 30 after the program year in which the loss occurred.





## DISASTER ASSISTANCE

### Livestock Indemnity Program

#### Overview

The Agriculture Improvement Act of 2018 (the 2018 Farm Bill) authorized the Livestock Indemnity Program (LIP) to provide benefits to eligible livestock owners or contract growers for livestock deaths in excess of normal mortality caused by eligible loss conditions, including eligible adverse weather, eligible disease and attacks by animals reintroduced into the wild by the federal government or protected by federal law, including wolves and avian predators. In addition, LIP provides assistance to eligible livestock owners that must sell livestock at a reduced price because of an injury from an eligible loss condition.

LIP is administered by the U.S. Department of Agriculture (USDA) Farm Service Agency (FSA). The occurrence of an eligible loss condition in and by itself - does not determine eligibility for eligible livestock losses. The livestock owner or contract grower must provide evidence acceptable to FSA that the eligible cause of loss not only occurred but directly caused loss or death.

LIP payments for owners are based on national payment rates that are 75 percent of the market value of the applicable livestock as determined by the USDA's Secretary of Agriculture. Rates for contract growers of poultry or swine will not exceed the rates for owners but are based on 75 percent of national average input costs for the applicable livestock.

The 2018 Farm Bill amended certain provisions related to LIP effective in 2019. Those amendments included:

- livestock death losses due to extreme cold are considered eligible losses without regard to vaccination protocol, or lack of vaccination; and
- providing for compensation for livestock death losses due to diseases that are caused or transmitted by a vector and are not controlled by vaccination or an acceptable management practice. These diseases were previously covered under ELAP.

#### Eligible Livestock Owners

##### To be eligible for LIP:

- A livestock owner must have legally owned the livestock on the day the livestock died and/or were injured by an eligible loss condition
- An owner's livestock must have either:
  - died in excess of normal mortality as a direct result of an eligible loss condition,
  - or been injured as a direct result of an eligible loss condition and were sold at a reduced price.

##### Eligible livestock must:

- Have been maintained for commercial use for livestock sale as part of a farming operation on the day they died; and
- Not have been produced or maintained for reasons other than commercial use as part of a farming operation. Excluded livestock includes wild free-roaming animals, horses or other



animals used or intended for racing or wagering, consumption by owner, and animals producers or maintained for hunting.

#### Eligible Livestock Contract Growers (Poultry and Swine)

Poultry and swine are the only kinds of livestock for which contract growers can be eligible under LIP.

To be eligible for LIP, in addition to meeting all other eligibility requirements for loss, a poultry or swine contract grower must have had the following:

- Possession and control of the eligible livestock; and
- A written agreement with the eligible livestock owner setting the specific terms, conditions and obligations of the parties involved regarding the production of livestock.

Contract growers are not eligible for losses under LIP for injured livestock that were sold at a reduced price due to an eligible loss condition.

#### Eligible Loss Conditions

An eligible loss condition includes any of the following that occur in the calendar year for which benefits are requested:

- Eligible adverse weather event;
- Eligible disease; and
- Eligible attack.

**The following types of livestock may be eligible for LIP:**

CATTLE	POULTRY	SWINE	OTHER
Adult Beef Bulls	Chickens, Broilers, Pullets	Suckling/Nursery Pigs (less than 50 pounds)	Alpacas
Adult Beef Cows	(regular size) (4.26 to 6.25 pounds)	Swine, Lightweight Barrows, Gilts	Deer Elk
Adult Buffalo/Bison/Water Buffalo Bulls	Chickens, Chicks Chickens, Layers	(50 to 150 pounds)	Emus
Adult Beefalo Bulls Adult	Chickens, Pullets/Cornish Hens (small size) (Less than 4.26 pounds)	Swine, Sows, Boars,	Equine
Beefalo Cows	Roasters (6.26 to 7.75 pounds)	Barrows, Gilts	Goats, Bucks Goats, Nannies
Adult Buffalo/Bison/Water Buffalo Cows	Super Roasters/Parts (7.76 pounds or more)	(151 to 450 pounds)	Goats, Slaughter Goats/Kids Llamas
Adult Dairy Bulls	Ducks, Ducklings Ducks,	Swine, Sows, Boars (over 450 pounds)	Ostriches
Adult Dairy Cows Non-Adult Beef Cattle	Ducks Geese, Goslings		Reindeer Caribou
Non-Adult Buffalo/Bison/ Water Buffalo	Geese, Goose Turkeys, Poults		Sheep, Rams
Non-Adult Beefalo Non-Adult Dairy Cattle	Turkeys, Toms, Fryers, Roasters		Sheep, Ewes
			Sheep, Lambs

Eligible adverse weather event means extreme or abnormal damaging weather that is not expected to occur during the loss period for which it occurred, which directly results in eligible livestock losses.

An eligible adverse weather event must occur in the calendar year for which benefits are requested. Eligible adverse weather events include, but are not limited to, as determined by the FSA Deputy Administrator of Farm Programs or designee, earthquake; hail; lightning; tornado; tropical storm; typhoon; vog, if directly related to a volcanic eruption; winter storm, if the winter storm lasts for three consecutive days and is accompanied by high winds, freezing rain or sleet, heavy snowfall and extremely cold temperatures; hurricanes; floods; blizzards; wildfires; extreme heat; extreme cold; and straight-line winds. Drought is not an eligible adverse weather event except when associated with anthrax, a condition that occurs because of drought and results in the death of eligible livestock.

Eligible disease means a disease that is exacerbated by an eligible adverse weather event that directly results in eligible livestock losses, including, but not limited to, anthrax, cyanobacteria, (beginning in 2015 calendar year), larkspur poisoning (beginning in 2015 calendar year) and Mycoplasma Bovis in Bison (beginning in 2021). In addition, eligible disease means a disease that is caused and/or transmitted by vectors and vaccination or acceptable management practices are not available, whether or not they were or were not implemented, that directly result in death of eligible livestock in excess of normal mortality, including but not limited to Blue Tongue, EHD, CVV, and Theileria Orientalis.

Eligible attack means an attack by animals reintroduced into the wild by the Federal Government or protected by Federal law, including wolves and avian predators, that directly results in either injured livestock sold at a reduced price or death of eligible livestock, in excess of normal mortality.

**Payments  
Livestock Death Losses**

LIP payments for livestock death losses, adjusted for normal mortality, are calculated by multiplying the national payment rate for the applicable livestock category by the number of eligible livestock in that category times the producer's share. Current year national payment rates are found at the end of this fact sheet.

The LIP national payment rate for eligible livestock owners is based on 75 percent of the average fair market value of the livestock, as provided in Table 1.

The LIP national payment rate for eligible livestock contract growers is based on 75 percent of the average income loss sustained by the contract grower with respect to the dead livestock, as provided in Table 2.

A contract grower's LIP payment will be reduced by the amount of monetary compensation received from the owner for the loss of income suffered from the death of livestock under contract.

**(continued on page 28)**

### Injured Livestock

For eligible livestock owners, LIP payments for injured livestock that are sold at a reduced price due to an eligible adverse weather event or eligible attack are calculated by multiplying the national payment rate for the applicable livestock category minus the amount that the livestock owner received for the eligible livestock in that category times the livestock owner's share. If injured eligible livestock are sold for more than the national payment rate for the applicable livestock category, there is no payment.

### Payment Limitations and Adjusted Gross Income (AGI)

For the 2017 and subsequent program years, there is no per person or legal entity program year payment limitation.

In evaluating average adjusted gross income, an individual or entity is ineligible for payment under LIP if the average AGI of the individual or entity exceeds \$900,000.

Direct attribution provisions apply to LIP. Under direct attribution, AGI provisions apply to the person or legal entity applying for payment as well as to those persons or legal entities with an interest in the legal entity or in a sub-entity.

For more information on payment limitations, visit [www.fsa.usda.gov/limits](http://www.fsa.usda.gov/limits).

### Applying for LIP

Owners or contract growers may apply to receive LIP benefits at local FSA offices.

Owners or contract growers who suffer livestock losses due to an eligible cause of loss must submit a notice of loss and an application for payment to the local FSA office that



serves the physical location county where the livestock losses occurred. All of the owner's or contract grower's interest in inventory of eligible livestock in that county for the calendar year must be accounted for and summarized when determining eligibility.

An owner or contract grower must file a notice of loss, an application for payment, and supporting documents by March 1 following the calendar year in which the eligible loss condition occurred.

For 2024 LIP losses, livestock owners and contract growers may apply for 2024 LIP benefits in the physical location county where the loss occurred.

The following table provides the final dates to file a notice of loss and application for payment:

DATE OF LIVESTOCK DEATH AND/OR INJURY	FINAL DATE TO FILE NOTICE OF LOSS	FINAL DATE TO SUBMIT AN APPLICATION FOR PAYMENT
Calendar year 2019 through 2022	by 30 calendar days of when the loss is first apparent to the participant.	60 days after the calendar year in which the eligible loss condition occurred
Calendar year 2023	60 days after the calendar year in which the eligible loss condition occurred	60 days after the calendar year in which the eligible loss condition occurred
Calendar year 2024 and subsequent years	March 1 following the calendar year the loss condition occurred	March 1 following the calendar year the loss condition occurred

**\*Producers must sell injured livestock within 30 days of the end of the disaster event**

Applications from eligible livestock owners for losses due to livestock injured due to an eligible loss condition will be processed and acted on as specified in this fact sheet.

Contract growers of poultry or swine must submit a copy of the grower contract and any other supporting documents required for determining eligibility. Similar to requirements for owners, supporting documents must show evidence of loss, current physical location of livestock in inventory and location of the livestock at the time of death.

### Livestock Loss Documentation

Livestock owners and contract growers must record all pertinent information (including the number and kind) of all livestock and those adversely impacted by an eligible loss condition resulting in either death losses or injury and sales of injured livestock at reduced price.

Owners who sold injured livestock for a reduced price because the livestock were injured due to an eligible adverse weather event or eligible attack, must provide verifiable evidence of the reduced sale of the livestock. The injured livestock must be sold to an independent third party (such as sale

barn, slaughter facility, or rendering facility).

Documents that may provide verifiable evidence of livestock sold at a reduced price include but are not limited to:

- sales receipts from a livestock auction, sale barn or
- other similar livestock sale facilities
- rendering facility receipts
- processing plant receipts

The documentation for injured livestock sales must have the price for which the animal was sold as well as information on livestock kind, type, and weight sold.

FSA will use information furnished by the applicant to determine eligibility. Furnishing the required information is voluntary; however, without all required information, program benefits will not be approved or provided.

### For More Information

This fact sheet is for informational purposes only; other eligibility requirements or restrictions may apply. To find more information about FSA disaster assistance programs, visit [farmers.gov](http://farmers.gov) or contact your local FSA office.

To find your local FSA office, visit [farmers.gov/service-center-locator](http://farmers.gov/service-center-locator).



KIND	TYPE	WEIGHT RANGE	2024 PAYMENT RATE PER HEAD
Alpacas			\$443.99
Beef	Adult	Bull	\$1904.81
		Cow	\$1465.24
	Non-Adult	Less than 400 pounds	\$627.86
		400 to 799 pounds 800 pounds or more	\$984.12 \$1640.19
Beefalo	Adult	Bull	\$1865.17
		Cow	\$1474.98
	Non-Adult	Less than 400 pounds	\$602.73
		400 to 799 pounds	\$1074.63
		800 pounds or more	\$1642.06
Buffalo/Bison/ Water Buffalo	Adult	Bull	\$1799.10
		Cow	\$1491.23
	Non-Adult	Less than 400 pounds	\$600.90
		400 to 799 pounds 800 pounds or more	\$1225.49 \$1645.16
Caribou	All		\$599.56
Chickens	Broilers/ Pullets (Regular Size)	4.26 to 6.25 pounds	\$3.00
	Chicks		\$0.27
	Layers		\$5.40
	Pullets/ Cornish Hens (Small size)	Less than 4.26 pounds	\$2.02
	Roasters	6.26 to 7.75 pounds	\$3.82
	Super Roasters/Parts	7.76 pounds or more	\$5.02
Dairy	Adult	Bull	\$1417.99
		Cow	\$1321.88
	Non-Adult	Less than 400 pounds	\$330.47
		400 to 799 pounds 800 pounds or more	\$660.94 \$1079.53
KIND	TYPE	WEIGHT RANGE	2024 PAYMENT RATE PER HEAD
Deer	All		\$599.56
Ducks	Ducklings		\$0.74
	Ducks		\$4.61
Elk			\$832.24
Emus			\$239.16
Equine			\$1016.42
Geese	Goose		\$52.48
	Gosling		\$11.02
Goats	Bucks		\$181.80
	Nannies		\$123.49
	Slaughter Goats/Kids		\$70.76
Llamas			\$358.89
Ostriches			\$796.14
Reindeer			\$599.56
Sheep	Ewes		\$169.21
	Lambs		\$179.26
	Rams		\$577.14
Swine	Suckling Nursery Pigs	Less than 50 pounds	\$39.65
	Lightweight Barrows, Gilts	50 to 150 pounds	\$73.13
	Sows, Boars, Barrows, Gilts	151 to 450 pounds	\$99.00
	Boars, Sows	450 pounds or more	\$185.62
Turkeys	Poults		\$2.60
	Toms, Fryers, Roasters		\$26.53
KIND	TYPE	WEIGHT RANGE	2024 PAYMENT RATE PER HEAD
Chickens	Broilers, Pullets (regular size)	4.26 to 6.25 pounds	\$0.33
	Chicks		\$0.22
	Layers		\$0.32
	Pullets, Cornish Hens (small size)	Less than 4.26 pounds	\$0.22
	Roasters	6.26 to 7.75 pounds	\$0.42
	Super Roasters/Parts	7.76 pounds or more	\$0.55
Ducks	Ducks		\$0.51
	Ducklings		\$0.51
Geese			\$5.77
Swine	Suckling Nursery Pigs	Less than 50 pounds	\$4.50
	Lightweight Barrows, Gilts	50 to 150 pounds	\$10.98
	Sows, Boars, Barrows, Gilts	151 to 450 pounds	\$14.87
	Boars, Sows	451 pounds or more	\$76.28
Turkeys	Poults		\$0.29
	Toms, Fryers, Roasters		\$2.92

# H5N1 VIRUS GUIDANCE FOR FARM WORKERS

H5N1 is a virus that causes what is known as “bird flu.” People can get sick with bird flu when they come into contact with infected birds or animals.



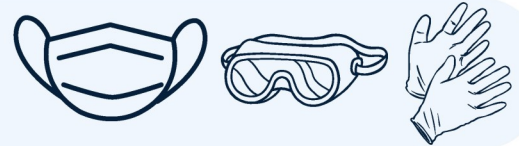
## Symptoms of bird flu can include:

Eye redness (conjunctivitis), cough, sore throat, runny or stuffy nose, muscle or body aches, headaches, fatigue, trouble breathing, and fever.

## How farm workers can protect themselves:

1

Wear protective clothing when working with sick or dead animals, feces, or milk.



2

Get a seasonal flu vaccine to reduce the risk of getting sick with human flu and bird flu at the same time.



3

Wash your hands thoroughly throughout the day and before eating. Avoid touching your face and mouth.



4

Do not drink raw or unpasteurized milk. You could get sick from drinking milk from sick cows.



## What to do if you are exposed or feel sick:

**If you were exposed to the H5N1 virus**, you should monitor your symptoms for 10 days from your last exposure.

**If you start to feel sick and have flu-like symptoms**, you should isolate away from other people right away and get tested by a healthcare professional.



**For questions about H5N1**  
Scan the QR code or visit:  
<https://www.cdc.gov/flu/pdf/avianflu/Bird-Flu-Exposure-Handout.pdf>



Adapted with permission from the New Mexico Department of Health

Updated:4/15/2024



CAMPBELL COUNTY  
**FARMERS  
MARKET**

**2025**

**Highland Heights\*— Tuesdays**

Senior Citizens Activity Center

3504 Alexandria Pike

**May 13 thru October 28**

3:00 p.m. to 6:00 p.m.

**Fort Thomas\*\*— Wednesdays**

Mess Hall in Tower Park

801 Cochran Avenue

**April 9 thru December 17**

3:00 p.m. to 6:00 p.m.

*Hours extend to 7:00 p.m. June-September  
(Senior shopping begins at 2:45 p.m.)*

**Alexandria\*— Fridays**

Southern Lanes Sports Center

7634 Alexandria Pike

**May 16 thru October 24**

3:00 p.m. to 6:00 p.m.

**Newport\*— Saturdays**

Next to Pepper Pod Restaurant

709 Monmouth Street

**May 18 thru October 26**

9:00 a.m. to 12 noon



\* Accepts WIC, SNAP and Senior Farmer's  
Market Nutrition Program

\*\* Accepts WIC, SNAP, Senior Farmer's  
Market Nutrition Program and Kentucky Double Dollars



# Enjoy the freshness, flavor and excellence of Kentucky Proud Produce

It really makes a difference when you purchase locally grown fruits and vegetables. You provide your family with garden fresh taste and quality, while also helping the community by keeping your food dollars close to home.



## Colorful Eating

Color-code your shopping and be on your way to better health. Each color group of produce offers different phytochemicals, antioxidants and nutrients that help you stay healthy in a variety of ways.



### Get the blues (and purples)

*Brain/memory, healthy aging, urinary tract*

#### Fruits

- Blackberries
- Blueberries
- Grapes
- Plums

#### Vegetables

- Eggplant
- Kohlrabi
- Purple asparagus
- Purple cabbage
- Purple carrots
- Purple peppers

### Great greens

*Vision, bones, teeth*

#### Fruits

- Apples
- Grapes
- Paw paws
- Pears

#### Vegetables

- Asparagus
- Beans
- Broccoli
- Brussel sprouts
- Cabbage
- Cucumbers
- Kohlrabi
- Leafy greens
- Lettuce
- Okra
- Onions (green)
- Peas
- Peppers
- Zucchini

### Wonderful whites

*Heart, maintain healthy cholesterol*

#### Fruits

- Pears (brown)
- White peaches

#### Vegetables

- Cauliflower
- Kohlrabi
- Onions
- Potatoes
- White corn

### Outstanding oranges (and yellows)

*Vision, immune system, heart*

#### Fruits

- Cantaloupe
- Peaches
- Yellow apples
- Yellow pears
- Yellow watermelon

#### Vegetables

- Carrots
- Corn
- Golden potatoes
- Peppers
- Pumpkins
- Squash
- Sweet potatoes
- Yellow tomatoes

### Radiant reds

*Heart, urinary tract, brain/memory*

#### Fruits

- Apples
- Grapes
- Pears
- Raspberries
- Strawberries
- Watermelons

#### Vegetables

- Beets
- Radishes
- Red peppers
- Sorghum
- Tomatoes
- Turnips





# CRUNCHY AIR FRYER FISH

Servings: Makes 4

Serving Size: 4 ounces

Recipe Cost: \$7.72

Cost per Serving: \$1.93



## Directions:

1. Wash hands with warm water and soap, scrubbing for at least 20 seconds.
2. Place fish between clean paper towels to allow any water to drain. Rewash hands after handling raw fish.
3. Create an assembly for coating the fish. First, in a small bowl, combine the garlic powder, paprika, chili powder, onion powder, black pepper, and salt; set aside. Then, in a shallow pan or plate, whisk the egg; set aside. Rewash hands after handling the raw egg. Place panko crumbs into another shallow pan or plate; set aside.
4. Coat fish on both sides with olive oil and sprinkle both sides with the seasoning mixture. Dip fish into the egg and coat both sides. Then dredge the fillets through the panko coating both sides thoroughly. Allow the coated fillets to rest about 10 minutes before cooking. Rewash hands after handling the raw fish.
5. Preheat the air fryer to 390 degrees F while the fish rests. Coat the preheated air fryer basket or pan with cooking spray. Add the fish, taking care not to overfill the basket or pan (you may need to work in batches). Cook for 10 to 13 minutes or until it reaches an internal temperature of 145 degrees F as measured on a meat thermometer.
6. Refrigerate leftovers within 2 hours. Reheat leftovers in the air fryer for a few minutes to revive the crunchy coating.

## Ingredients:

- 1 pound of white fish fillets (tilapia, catfish, perch, etc.)
- 1/4 teaspoon salt
- 1/2 teaspoon garlic powder
- 1 egg
- 1/2 teaspoon paprika
- 1 tablespoon olive oil
- 1/4 teaspoon chili powder
- 1 cup panko crumbs
- 1/4 teaspoon onion powder
- Nonstick cooking spray
- 1/4 teaspoon black pepper

## Tips:

No air fryer? No problem. Simply bake these in the oven at 400 degrees F for 12 to 15 minutes or until they reach an internal temperature of 145 degrees F as measured on a meat thermometer.

## Nutrition facts per serving:

230 calories; 7g total fat; 1.5g saturated fat; 0g trans fat; 105mg cholesterol; 260mg sodium; 16g total carbohydrate; 0g dietary fiber; 1g total sugars; 0g added sugars; 26g protein; 20% Daily Value of vitamin D; 2% Daily Value of calcium; 6% Daily Value of iron; 8% Daily Value of potassium

Source: Brooke Jenkins, Extension Specialist for Curriculum, University of Kentucky Cooperative Extension Service



# CAMPBELL COUNTY FARM & LIVESTOCK EXPO

**Saturday, May 3, 2025**  
9:00 a.m. — 2:00 p.m.

## Activities & Demonstrations

Times	Event
9:00	<ul style="list-style-type: none"> <li>NKHN Horse Show</li> <li>Beefin' Up the Calves Fun Run</li> </ul>
9:30	YoGoat Cincinnati Goat Yoga
10:00	Josh Yaber: Diamond Y Stockdogs
10:30	Tractor Driving Contest for all Ages
11:00	Live Auction
On Going	<ul style="list-style-type: none"> <li>Antique Tractor &amp; Car Show</li> <li>Sheep &amp; Goat Hoof Trimming</li> <li>Sheep Shearing</li> <li>Farm Activities &amp; Animal Exhibit</li> <li>Free Health Screening -Glucose &amp; Blood pressure check</li> </ul>



**BEEFIN'**  
**UP THE CALVES**  
Fun Run

**LIVE AUCTION**  
**11:00 A.M.**

## Consignment Auction

### Farm, Lawn & Garden Equipment

#### Consign Early for Free Advertising

Consignment Rate	\$200.00 & Under	20%
	\$201.00 & Over	10%
Maximum Commission	\$300.00	
No Sale Fee	\$25.00	

Terms: Cash or check with ID. No debit or credit cards accepted. **AE (Tax Exempt) numbers required for all farm exempt purchases.** Announcements day of sale take precedence over written material. Not Responsible for Accidents.

**Receiving equipment April 30 & May 2nd**  
**9:00 a.m. — 6 p.m.**

Double H Auction Services  
Bill Hall Principal Auctioneer | (859) 322-9217

For more information:



michelle.simon@uky.edu  
(859) 572-2600



patti.dischar@campbellkyconservation.org  
(859) 635-9587