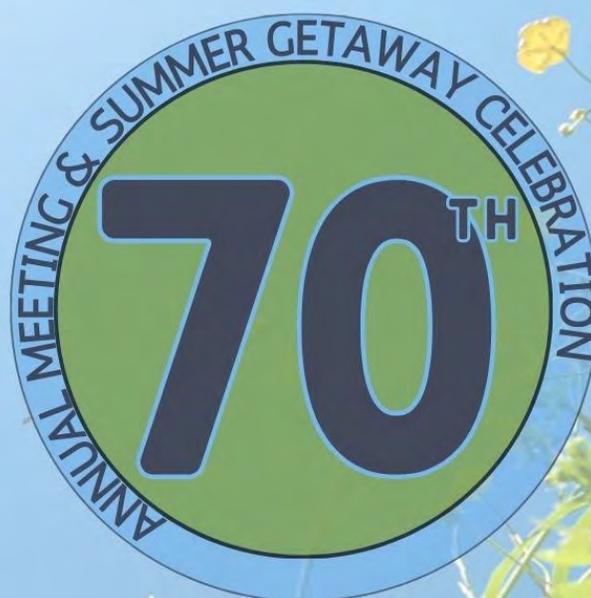


# TN POULTRY NEWSLETTER

SUMMER ISSUE - JUNE 2024

COMPLEX & ALLIED MEMBER NEWS	6
ANNUAL MEETING ANNOUNCEMENTS	7, 43-45, 47
HPAI IN THE NEWS	9-12
AVIAN DISEASE	13-14
PROPANE REPORT	15
SCHOLARSHIP FUNDRAISERS	16-18
LIVE PRODUCTION ARTICLES	22-24
REGULATORY ITEMS	29-32
LIGHTING ARTICLES	34-38
COMMODITY REPORT	39-42
ALLIED MEMBERS DIRECTORY	48-50



## A year of milestones

It's hard to believe an entire year has passed since I was blessed to become the Executive Director of the TN Poultry Association. A lot has happened in the past year, including the adoption of a new mission statement for our association. It is such an honor to work with a group of men and women who are dedicated to making sure we move into the future with a clear purpose of serving our membership well.

That legacy of service to the poultry industry in TN began with a small group of visionaries who held the very first annual meeting 70 years ago at Fall Creek Falls State Park. I can imagine how excited they would be to see us celebrate our 70<sup>th</sup> anniversary of holding annual meetings this year. I hope they would all be proud to watch us welcome an expected crowd of over 400 people to the Gaylord Opryland Resort in Nashville for what is now known as the TPA Annual Meeting & Summer Getaway. We sure hope you'll join us for the celebration on August 9<sup>th</sup> and 10<sup>th</sup>.

This year also marks the 10<sup>th</sup> year since the TPA scholarship program began. Former TPA board member Dwight Curl brought the idea to the board who passionately agreed with his suggestion. The first golf scramble in 2014 brought in a net profit of \$4,000 that was awarded to a couple of grower member kids who are both still active in the poultry industry today. Ten years later, because of that board's vision and YOUR generosity, we have raised close to \$300,000 for scholarships and helped nearly 100 students further their education. There aren't enough ways to say thank you to everyone who has supported this program.

I can't wait to see what the future holds for our association and hope to see all of you in Nashville in August!  
Tracy

### TPA Mission Statement:

*The Tennessee Poultry Association (TPA) is dedicated to advancing and strengthening the integrated broiler/breeder industry in Tennessee and beyond. Our mission is to foster the growth and sustainability of the poultry sector through a comprehensive approach that encompasses education, policy advocacy, and public relations. We represent poultry stakeholders – including growers, integrators, genetics companies, and allied poultry companies -- in legislative matters, advocating for their best interests. Moreover, TPA actively nurtures the next generation of poultry industry leaders by supporting higher education programs and youth initiatives. Through scholarships and legislative advocacy, we empower students pursuing poultry-related degrees and provide support to poultry growers and their families.*



**Proxy-Clean<sup>®</sup>  
Brand**

**Mineral-Clean<sup>®</sup>**

An acid blend that efficiently removes mineral build-up and scale. Conditions water by lowering PH

Equipment Friendly



Water Conditioner



Environmentally Safe



Affordable



**Chloride/Chlorine Free**  
Greatly reduces the potential for corrosion

[proxycleanproducts.com](http://proxycleanproducts.com)





# DIVERSIFIED

DiversifiedAg.com

The **Plasson Red Nipple** provides superior longevity and an unmatched flow range to maximize broiler growth. Its dual sealing technology and excellent side action sensitivity enable your day old chicks to start strong and stay healthy.



To optimize management and performance, pair with the **Plasson Water on Demand Pro**



Controllers & Communication



Heating



Ventilation



Feeding & Watering

## ALWAYS THE RIGHT FIT

Diversified's complete solutions enhance performance and maximize results.



## TPA BOARD OF DIRECTORS

**President** - Jeremy Martin  
 Aviagen NA - Huntsville, AL  
 (256) 777-8213  
 jmartin@aviagen.com

**1st VP** - David Wilds  
 Koch Foods - Morristown, TN  
 (423) 586-5722  
 david.wilds@kochfoods.com

**2nd VP** - Scott Black  
 Cobb-Vantress - Charleston, TN  
 (423) 595-1532  
 scott.black@cobbvantress.com

**Secretary/Treasurer** - Andrew Todd  
 MP Equipment - Cookeville, TN  
 (256) 698-1310  
 andrew.todd@mpequipment.com

**Immediate Past President** -  
 Clint Lauderdale  
 Poultry Guard LLC - Hanceville, AL  
 (256) 636-3303  
 clintlauderdale@poultryguard.com

### TPA Board Members

Andrew Blair - Tyson Shelbyville  
 Darryl Brown - Grower (Lawrenceburg)  
 Chase Cloyd - Perdue Monterrey  
 Jeri Beth Davis - Tyson Humboldt  
 John Elmore - Huvepharma  
 Andy Goldman - Aviagen, Inc.  
 Vance Keaton - Live Oak Bank  
 Melissa Marler - Koch Foods Chattanooga  
 Dale McLerran - Grower (Moss)  
 Heath Morrow - D&F Equipment Sales  
 Brad Nance - Pilgrim's Chattanooga  
 Keith Riley - Tyson Obion County  
 Scott Seabrook - Cantrell-Gainco  
 David Tallent - Grower (Spring City)  
 Chynette Todd - CT Consulting

# 2024 EVENTS CALENDAR

<p><b>JULY 9-10</b></p> <p><b>USPOULTRY Hatchery Breeder Clinic</b></p> <p><i>Embassy Suites Downtown</i></p> <p>Nashville, TN</p>	<p><b>AUG. 9-10</b></p> <p><b>TPA Annual Meeting &amp; Summer Getaway</b></p> <p><i>Gaylord Opryland Resort &amp; Convention Center</i></p> <p>Nashville, TN</p>
<p><b>OCT. 3-4</b></p> <p><b>USPOULTRY Live Production - Welfare &amp; Biosecurity Seminar</b></p> <p><i>Embassy Suites Downtown</i></p> <p>Nashville, TN</p>	<p><b>NOV. 7-9</b></p> <p><b>USPOULTRY National Breeders Roundtable</b></p> <p><i>Holiday Inn Vanderbilt</i></p> <p>Nashville, TN</p>
<p><b>NOV. 7 &amp; TBD</b></p> <p><b>TPA Grower Meetings</b></p> <p>NOV. 7: <i>Museum Center at Five Points in Cleveland, TN</i></p> <p>TBD: <i>Campus of UT Martin in Martin, TN</i></p>	<p><b>REAP</b></p> <p><b>REAP Grant Deadlines</b></p> <p><i>June 30, 2024</i></p> <p><i>September 30, 2024</i></p> <p><b>USDA.gov</b></p>

## TPA Poultry Company Members



KOCH FOODS



## Advertising Index

Ag Lighting Innovations - 36  
 Big Dutchman - 26  
 Boehringer Ingelheim - 30  
 Clear View Enterprises - 27  
 Diversified Ag - 3  
 Farm Credit Mid-America - 22

First Financial Bank - 20  
 Georgia Poultry Equipment - 29  
 Hubbard - 12  
 Live Oak Bank - 24  
 Lubing - 10  
 Poultry South - 11, 25

Proxy-Clean Products - 2  
 Reliable Poultry - 32  
 River Valley AgCredit - 9  
 Southland Organics - 8  
 Sunbelt Rentals - 5  
 Thompson Gas - 15



**WE'LL MAKE  
IT HAPPEN**



**WE BRING MORE "YES" TO YOUR PRODUCTION**

When it comes to your processing plant, you can't afford excessive downtime. You need a partner who can take on anything from planned maintenance to an emergency outage and get the job done safely and effectively. As your one-stop shop for total plant solutions, Sunbelt Rentals is expertly equipped to address your evolving operational needs. From condensation control and power generation to air compressors and material handling, our team provides full turnkey solutions, customized to elevate performance and keep your production rolling. Make it happen today with the industry leader in comprehensive rental service and support.

Visit [sunbeltrentals.com](http://sunbeltrentals.com) or call **800-736-2504** to bring more "Yes" to your processing plant.

© 2019 Sunbelt Rentals. All Rights Reserved.



## Allied Member News

**Marel** introduced a new ModularOven+, offering customizable state-of-the-art oven technology. The Marel ModularOven+ is designed to meet varied production needs with flexibility and high yield while also providing machine health monitoring.

**Zoetis Inc.** has been named to Fair360's Top 50 Companies list for the first time, underscoring the company's progress and sustained commitment to advancing diversity, equity and inclusion (DE&I).

**Jones-Hamilton Co.** was recognized by the Ohio Employee Ownership Center at Kent State University for 40 years of participation in an Employee Stock Ownership Program (ESOP) during the organization's annual meeting on April 18, 2024. Originally established by company founders, J. Kern Hamilton and Jim Black, the ESOP now owns 99% of the company and has more than 150 participants.

**Cargill** has been recognized on the Fortune list of America's Most Innovative Companies 2024. This marks the second consecutive year Cargill has been honored among the 200 companies listed as "transforming industries from the inside out."

**Robert King**, with Southeastern Land Group in Dadeville, AL, has been recognized as the APEX 2023 Region 9 (AL, AR, KY, LA, MS, TN) Broker of the Year in Agribusiness Sales by the REALTORS® Land Institute as a part of the RLI APEX Production Awards Program, sponsored by The Land Report. King was recognized by RLI CEO Aubrie Kobernus, MBA, RCE, as well as The Land Report's Co-founders Eddie Lee Rider Jr. and Eric O'Keefe at a special awards ceremony on Tuesday, March 12, during RLI's 2024 National Land Conference (NLC24) in Louisville, KY. "This is really an award for a great team. Our team at Southeastern Land Group and the **PoultrySouth** Team are the best people to work with anywhere, and I am honored to be one part of that team.



**Merck Animal Health\*** has introduced Innovax®-ILT-IBD, a vaccine that provides combined protection and immunization against Marek's disease (MD), infectious laryngotracheitis (ILT) and infectious bursal disease (IBD) in a single injection.

**International Paper** (IP) and DS Smith announced that they have reached agreement on the terms of a recommended all-share combination (the "Combination"), creating a truly global leader in sustainable packaging solutions.

**Signify** recently introduced a new product, Optient, a lighting solution focused on optimizing animal health and productivity for the poultry industry. The product was developed with Tyson Foods to improve animal welfare and feed conversion to reduce energy usage. See more on page 22 of this newsletter.

*Please send your Allied Member News and News From Around the Complexes submissions to [Jocelynn@tnpoultry.org](mailto:Jocelynn@tnpoultry.org) by August 31 to be included in the next newsletter.*

## News From Around the Complexes

**Damon Kuntz** is the new Sr. Live Production Manager for the **Tyson Foods Humboldt** complex. Damon has been with Tyson for 26 years, most recently as the Breeder/Hatchery Manager in Nashville, AR. He has experience in every aspect of live production and holds a Bachelor's Degree in Agriculture Business from Southern Arkansas University. **Jeri Beth Davis** recently moved into the Breeder Manager position at the Humboldt complex.



## WELCOME NEW ALLIED MEMBERS



**Bob Reeves**  
936-591-1900



Engineers and Soil Scientists  
agriwaste.com | 919.859.0669

AgriWaste Technology  
**Emory Skinner**  
919-729-5696



# ANNUAL MEETING & SUMMER GETAWAY

AUGUST 9TH-10TH, 2024



GAYLORD OPRYLAND RESORT  
& CONVENTION CENTER

# 70<sup>th</sup> ANNIVERSARY CELEBRATION



SCAN TO BOOK YOUR ROOM!

Registration deadline is  
*July 8th, 2024*

Deadline to get the group discount  
on rooms is 4:00 PM CT on  
*July 10th, 2024*

To register: <https://www.tnpoultry.org/meeting/registrationForm.cfm>

For more information, contact Jocelynn Magan at [jocelynn@tnpoultry.org](mailto:jocelynn@tnpoultry.org)

## USDA proposes added regulations on poultry tournament systems

June 4, 2024 at [MeatPoultry.com](https://meatpoultry.com) by Rachael Oatman

The US Department of Agriculture (USDA) proposed a new rule to address competition issues for poultry growers and farmers on June 3. The Poultry Grower Payment Systems and Capital Improvement Systems rule is the third in a suite of Packers and Stockyards Act rules created to foster fairer markets.

“Poultry growers deserve a fair shake, and consumers deserve fair prices,” said Andy Green, USDA senior advisor for fair and competitive markets. “This proposed rule is intended to provide growers with a clear base price in contracts, a contracting partner that designs and operates any comparisons fairly, and access to the information that growers — and USDA — need to identify and halt coercive investment demands before growers take on large debts.”

The proposed rule seeks to address abuses in relation to grower ranking payment systems and additional capital investment requirements that poultry companies commonly ask of their contract growers for broiler chicken.

If finalized, the rule would prohibit deductions from the base price in contracts for broiler chicken growers, permitting only bonuses for performance. It would provide tools for growers to identify risks that may arise on capital improvement practices as well as enhance USDA’s ability to enforce prohibitions on unfair capital improvement practices. Additionally, the rule would establish a duty of fair comparison to ensure grower tournaments are conducted reasonably and equitably so as not to disadvantage specific growers.

An unofficial version of the rule can be found on the USDA’s Agricultural Marketing Service site. The official proposed rule will be published in the Federal Register at a later date. Once it is published in the Federal Register, the public will have 60 days to comment on the rule.

In response to the initial announcement of the rule, the National Chicken Council (NCC) issued a statement.

“These are solutions in search of problems that do not exist,” said NCC President Mike Brown. “This is the latest example of the Biden administration racing to impose its anti-business regulatory agenda ahead of November’s election. This rule — which Congress never asked for — will lead to rigid, one-size-fits-all requirements on chicken growing contracts that would stifle innovation, lead to higher costs for consumers, decrease competition and cost jobs by driving some of the best farmers out of the chicken business...” [Click here for full article](#)

The advertisement features a background image of several white chickens with red combs. In the foreground, four Southland Organics products are displayed: a large white jug of 'BIG OLE BIRD POULTRY PROBIOTIC', a smaller white jug of 'MOTHER LOAD', another large white jug of 'LITTER LIFE', and a blue pouch of 'CATALYST POULTRY VITAMIN'. A teal hexagonal icon with a white chicken silhouette is positioned to the right of the products.



**SOUTHLAND**  
ORGANICS

---

**BETTER GUT  
HEALTH**

**BETTER BIRD  
PERFORMANCE**

---

MAXIMIZE YOUR FLOCK'S POTENTIAL  
PROBIOTICS | VITAMINS | ACV

SOUTHLANDORGANICS.COM 800-608-3755  
ALLEN@SOUTHLANDORGANICS.COM

### Cornell scientists sequencing HPAI virus to learn more

April 4, 2024 at [FeedStrategy.com](https://FeedStrategy.com) by Ann Reus

Virology experts from Cornell University are sequencing the highly pathogenic avian influenza (HPAI) virus that has affected dairy cattle in several states to better understand why the virus jumped to cows and how to prevent future outbreaks. [Click here for full article](#)

### Auburn Researcher Aims to Help Prevent, Control Avian Influenza

April 8, 2024 at [PoultryTimes.com](https://PoultryTimes.com) by Rachel Damiani

Since 2022, avian flu — a rapidly circulating Influenza Type A virus — has affected more than 81 million poultry, as well as the industries that depend on them. In Alabama alone, poultry generates more than 80,000 jobs and \$15 billion in revenue. [Click here for full article](#)

### European Study Confirms Importance of Biosecurity in HPAI Control

April 22, 2024 at [WattAgNet.com](https://WattAgNet.com) by Jackie Linden

Even if poultry are vaccinated against highly pathogenic avian influenza (HPAI), biosecurity is a crucial tool in disease control, according to a new European study that also looked at surveillance strategies. Even if poultry are vaccinated against HPAI, biosecurity remains an essential element of disease control. This is one of the key messages in a second paper on the control of avian flu recently published by the European Food Safety Authority (EFSA) and the European Reference Laboratory for Avian Influenza. [Click here for full article](#)

### Like to save stuff? You might be attracting avian flu

April 22, 2024 at [WattAgNet.com](https://WattAgNet.com) by Roy Graber

The things you keep around may actually pose a biosecurity risk to the animals on your farm. [Click here for full article](#)



# FINANCING

# POULTRY FACILITIES

*Construction or Purchase*



**TODD MILES**  
RELATIONSHIP MANAGER  
**423-529-4782**



**HUNTER BALLEW**  
RELATIONSHIP MANAGER  
**423-205-1344**



## US has first instance of avian influenza in goats

March 19, 2024 at [WattAgNet.com](#) by Roy Graber

The first case of highly pathogenic avian influenza (HPAI) in domestic livestock in the United States during the 2022-24 HPAI outbreak has been confirmed. [Click here for full article](#)

## Scientists fear for penguin populations as Antarctica sees first case of bird flu

March 28, 2024 at [PoultryTimes.com](#) by Elizabeth Bobenhausen

In February, Reuters reported scientists discovered a fatal case of a type of avian influenza on the continent of Antarctica that could cause harm to the penguin populations. [Click here for full article](#)

## UF: Report recounts Florida dolphin found with HPAI in 2022

May 3, 2024 at [PoultryTimes.com](#) by Sarah Carey

The case of a Florida bottlenose dolphin found with highly pathogenic avian influenza virus, or HPAI — a discovery made by University of Florida researchers in collaboration with multiple agencies and one of the first reports of a constantly growing list of mammals affected by this virus — has been published in Communications Biology. [Click here for full article](#)

## Avian flu in cows was mostly a surprise

May 10, 2024 at [FoodSafetyNews.com](#) by News Desk

How surprised was science when bird flu was detected in dairy cattle with those warnings against raw milk or eating unpasteurized dairy products? Two Auburn University researchers are offering their expertise on the topic. Dr. Shollie Falkenberg, an associate professor and coordinator of animal health research, and Dr. Cris Young, a professor of practice at Auburn's College of Veterinary Medicine, provide the following informed, broad perspective on the issue. [Click here for full article](#)



# PROUD TO CALL TENNESSEE HOME!

Making the best quality drinkers and egg conveying systems, backed by exceptional service, is what we do at LUBING Systems in Cleveland, Tennessee. Every product is carefully inspected and assembled here in this great state. Thank you for your business and let us know how we can help you. **FROM OUR HANDS TO YOUR FARM.**

## LUBING

RELENTLESS QUALITY. EXCEPTIONAL SERVICE.



WWW.LUBINGUSA.COM | INFO@LUBINGUSA.COM | 423-709-1000



# **WE'RE WITH YOU *EVERY STEP OF THE WAY***

**Poultry farmers can't stop doing the work once birds are in the houses. They have to see them all the way through the flock. We believe in taking care of our farmers the same way. Every step of the way. From the beginning to the end... always willing to put in the extra hard work that it takes to make it successful for our client, you. Too often, non-farmers don't see all the work it takes to get their food on their plate. To them, it looks almost effortless sometimes. We know different because we have lived and worked the farm ourselves. The same goes for doing the good work of marketing and selling farms. Unless you do it every day, you don't see the hard hours, extra-long days, and all the work that goes into preparing to just start the day's duties. Selling and marketing farms is a lot like farming. It only works right when you are there every step of the way.**



[www.poultrysouth.com](http://www.poultrysouth.com)



256-475-0490  
[PSTEAM@POULTRYSOUTH.COM](mailto:PSTEAM@POULTRYSOUTH.COM)

### Are animal activists spreading avian flu to poultry farms?

May 2, 2024 at [WattAgNet.com](http://WattAgNet.com) by Meredith Dawson

The California Department of Food and Agriculture has questioned if animal welfare activists were the source of HPAI outbreaks that occurred at the end of 2023. [Click here for full article](#)

### Ernst Leads Bipartisan, Bicameral Effort to Protect Poultry Exports

May 8, 2024 at [FoodMarket.com](http://FoodMarket.com)

U.S. Senator Joni Ernst (R-Iowa) led over 50 of her colleagues in calling on the U.S. Department of Agriculture (USDA) to protect America’s agricultural competitiveness by adopting a better definition of "poultry" so Iowa farmers will not miss out on trade opportunities. [Click here for full article](#)

### Bird flu remains widespread but still a low risk for humans

May 24, 2024 at [FoodSafetyNews.com](http://FoodSafetyNews.com) by Dan Flynn

According to the federal Centers for Disease Control and Prevention in Atlanta, the widespread H5 bird flu remains a low health risk for humans. That assessment comes after a third human case since 2022 was recently reported in the United States, and it was the second involving exposure this year to dairy cows. [Click here for full article](#)



**Hubbard**  
YOUR CHOICE, OUR COMMITMENT

BREEDING FOR YOU SINCE 1921

HUBBARD CONVENTIONAL  
*the efficient choice!*

## EFFICIENCY PLUS



HIGH NUMBER OF GOOD QUALITY HATCHING EGGS AND CHICKS AT LOW COST

[www.hubbardbreeders.com](http://www.hubbardbreeders.com)

## Researchers Complete Risk Assessment Comparing Alternative Approaches to Regulating Salmonella in Poultry

March 21, 2024 at [USPOULTRY.org](https://usoultry.org) by Gwen Venable

USPOULTRY and the USPOULTRY Foundation announce the completion of a funded research project at the University of Illinois at Urbana-Champaign in which researchers completed a risk assessment comparing alternative approaches to regulating Salmonella in poultry. The research was made possible in part by an endowing Foundation gift from Cooper Farms and proceeds from the International Poultry Expo, part of the International Production & Processing Expo (IPPE). The research is part of the Association's comprehensive research program encompassing all phases of poultry and egg production and processing. In total, more than \$36 million has been invested in research by the Association and Foundation since the 1960s. [Click here for full article](#)

## Better Beetle Control Key to Salmonella Reduction in Poultry

April 2, 2024 at [WattAgNet.com](https://wattag.net) by Elizabeth Doughman

New data shows a correlation between darkling beetle populations and Salmonella loads in poultry houses, highlighting the importance of pest control in pre-harvest food safety. "The industry really understands that insects are reservoirs for certain types of diseases. But I think what really hasn't been clear is how much do they impact that end result," Dr. Alissa Welsher, senior monogastric technical consultant, Elanco, said. [Click here for full article](#)

## 'Deep Serotyping' Providing New Roadmaps for Managing Salmonella in Poultry

May 3, 2024 at [ModernPoultry.Media](https://modernpoultry.media) by Kaitlin Karschner

Traditional methods to detect Salmonella in poultry and trace outbreaks often fail to give the full picture of the threat in enough time for integrators to act. This lack of oversight limits the effectiveness of intervention strategies designed to mitigate Salmonella transmission. [Click here for full article](#)

## Multipronged approach best for broiler Salmonella control

May 6, 2024 at [WattAgNet.com](https://wattag.net) by Mark Clements

Combining interventions has the greatest impact on controlling the bacteria in broiler production, meat processing. [Click here for full article](#)

## Optical Imaging Technology Could Help Detect Woody Breast

April 11, 2024 at [WattAgNet.com](https://wattag.net) by Meredith Dawson

An optical imaging technology could potentially help poultry producers detect woody breast in processing plants. The technology uses optical imaging and deep learning Artificial Intelligence (AI) systems to identify myopathies, such as woody breast, using cameras that look for meat defects. The deep learning system works by taking historical knowledge and images entered by developers. This helps it learn to identify muscle myopathies. As the system is given more defects to detect, it will become quicker and more accurate in identification. Yuzhen Lu, Ph.D., Michigan State University Biosystems and Agricultural Engineering Assistant Professor said the system can detect woody breast objectively, without affecting the product. [Click here for full article](#)

## Researchers Map Out Anatomy of Wooden Breast Syndrome in Broiler Chickens

May 9, 2024 at [PoultryProducer.com](https://poultryproducer.com) by Sophi Fairman

Each year, Delaware farms raise more than 240 million broiler chickens, the top agricultural commodity in the state with a \$3.5 billion impact on the state's economy. But a disease characterized by firm, yellowish breast muscle is estimated to affect up to 5% of a given flock, rendering meat from those birds unmarketable. The disease, known as wooden breast syndrome, may be costing U.S. poultry farmers at least \$200 million per year. [Click here for full article](#)

## UGA Scientist Shares Latest Insights on APEC in Chickens

May 14, 2024 at [ModernPoultry.Media](https://modernpoultry.media)

Despite the industry's best efforts to control colibacillosis in layers, broilers and breeders, the bacterial disease caused by avian pathogenic Escherichia coli (APEC) continues to challenge producers and researchers. Colibacillosis can impact layers, broilers and breeders, leading to severe economic losses in the global poultry industry. At the 2024 International Poultry Science Forum, Catherine Logue, Ph.D., professor in University of Georgia's Department of Population Health, presented the latest information on APEC. [Click here for full article](#)

## Coccidiosis breaks in layers: Who's to blame?

March 26, 2024 at [ModernPoultry.Media](#) by Daniel Wilson DVM

(Fist in two-part series) Coccidiosis is one of the most frustrating diseases encountered by poultry producers. This is especially so in long-lived birds like layers. A producer can make one chess move, only to be faced with a countermove by these ubiquitous protozoa. [Click here to full article](#)

## Microbial mix could help improve coccidiosis management in broilers

May 29, 2024 at [ModernPoultry.Media](#)

Using a dietary supplement containing a blend of *Bacillus* bacterial strains appears to positively affect the intestinal health and immunity of broiler chicks after a coccidia challenge, according to a *Frontiers in Microbiology* report. [Click here for full article](#)

## Experts evaluate methods to control *Campylobacter* in chicken meat

March 14, 2024 at [FoodSafetyNews.com](#) by Joe Whitworth

According to scientists, no interventions precisely control *Campylobacter* on meat. [Click here for full article](#)

## E. *Cecorum* Recovered from Commercial Poultry

April 10, 2024 at [ThePoultrySite.com](#) by Chris Wright

*Enterococcus cecorum* (EC) is a Gram-positive bacterium that recently has been identified as an important cause of systemic disease and lameness in broilers. Research data related to the differentiation between pathogenic and commensal EC obtained from field outbreaks is limited. Phenotypic and genotypic characteristics of EC, including the lack of the ability to metabolize mannitol and the presence of the *cpsO* gene, have been associated with pathogenicity. [Click here for full article](#)

## E. *cecorum* affects young broilers

May 13, 2024 at [ThePoultrySite.com](#) by Chris Wright

*Enterococcus cecorum* is linked to pericarditis, septicemia and early mortality in broilers. [Click here for full article](#)

## Avian metapneumoviruses are difficult to control

May 8, 2024 at [ThePoultrySite.com](#) by Chris Wright

The clinical signs are often mild, but can be exacerbated by secondary bacterial pathogens. [Click here for full article](#)

SPECIAL THANKS TO OUR SCHOLARSHIP FUNDRAISER SPONSORS!



Albany and OBC



farmCREDIT  
MID-AMERICA



## Propane prices, REAP grant opportunities, and Emergency Waiver updates

June 3, 2024

The Mont Belvieu **Propane Spot Price** on May 28, 2024, was at **\$0.73/gal.**

Allowing for an average of \$0.60 per gallon for tariffs, handling and delivery to most areas, **the average current retail price can be expected to be roughly \$1.33/gal.** Larger accounts can often negotiate a lower price agreement by as much as \$0.05/gal., or more. To follow Mont Belvieu spot pricing, go to [https://www.eia.gov/dnav/pet/hist/er\\_eplpa\\_pf4\\_y44mb\\_dpgD.htm](https://www.eia.gov/dnav/pet/hist/er_eplpa_pf4_y44mb_dpgD.htm) and scroll to the very bottom of the page. TPA's allied member propane companies welcome discussing this with you to provide best pricing and services. Their contact information is at the back of this newsletter within the allied member listings.

**Propane futures** can be followed at <https://www.cmegroup.com/trading/energy/petrochemicals/mont-belvieu-propane-5-decimals-swap.html#>.

For **REAP grant funding** for energy retrofit projects go to <https://www.rd.usda.gov/programs-services/rural-energy-america-program-renewable-energy-systems-energy-efficiency>. The next **application deadline** is June 30, 2024. Visit your local NRCS county office for more information. The addresses and phone numbers for the Tennessee Service Centers by county can be found at <https://www.nrcs.usda.gov/sites/default/files/2022-10/Field%20service%20centers%20by%20county.pdf>. Everyone is encouraged to know and stay in contact with their local NRCS District Conservationist, and County Ag Extension agent. These folks are valuable resources and can help you save money.

Current updates for **FMCSA emergency declarations, HOS waivers, and exemptions** can be found at <https://www.fmcsa.dot.gov/emergency-declarations>.

# THOMPSON GAS

SEVIERVILLE, TN	866-908-1001
ATHENS, TN	423-745-3561
LYNCHBURG, TN	931-759-4114
LORETTO, TN	931-583-7166
WAYNESBORO, TN	931-724-5627



WE BELIEVE IN  
**A FAIR PRICE  
FOR PROPANE,  
TOP NOTCH SERVICE**  
and  
**THE LOCAL FOLKS  
THAT MAKE IT ALL HAPPEN**

**NOW SIGNING GUARANTEED DELIVERY PROPANE CONTRACTS FOR THE  
2024/2025 SEASON WITH REASONABLE CREDIT TERMS AVAILABLE**

# WINNERS

## GOLF



### FLIGHT 1

**1st:** Hayden Blair, Andrew Blair, Russ Bratton, and Bill Ramsey

**2nd:** Mark Wolfe, Steve Wilson, Jason Bobo, and Keith Bellenfant



### FLIGHT 2

**1st:** Brandon Hollowell, Tim Lowhorn, Ty Lowhorn, and Tanner Lowhorn

**2nd:** Rory DeWeese, James Crabtree, Jay Greer, and Casey Flemon



## SPORTING CLAYS

### FLIGHT 1:

**1st:** Keith Riley (87)

**2nd:** Clint Lauderdale (85)

**3rd:** Matthew Butler (85)

*Highest Placing Female:  
Alea Belflowers*



### FLIGHT 2:

**1st:** Jaye Gruhn

**2nd:** Charlie Thompson

**3rd:** Wes Pedigo

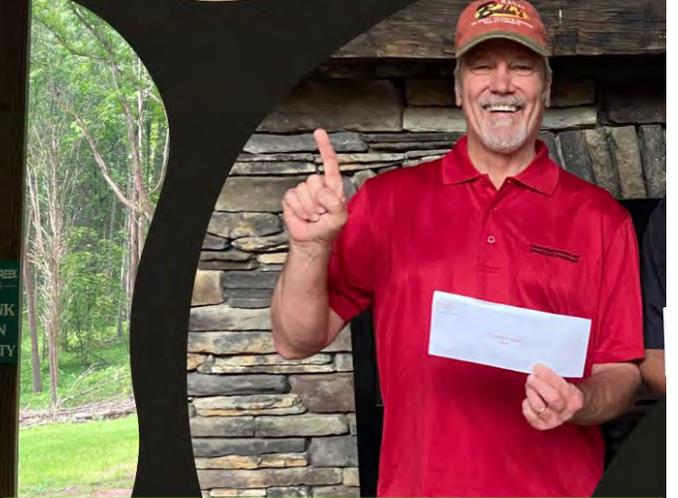
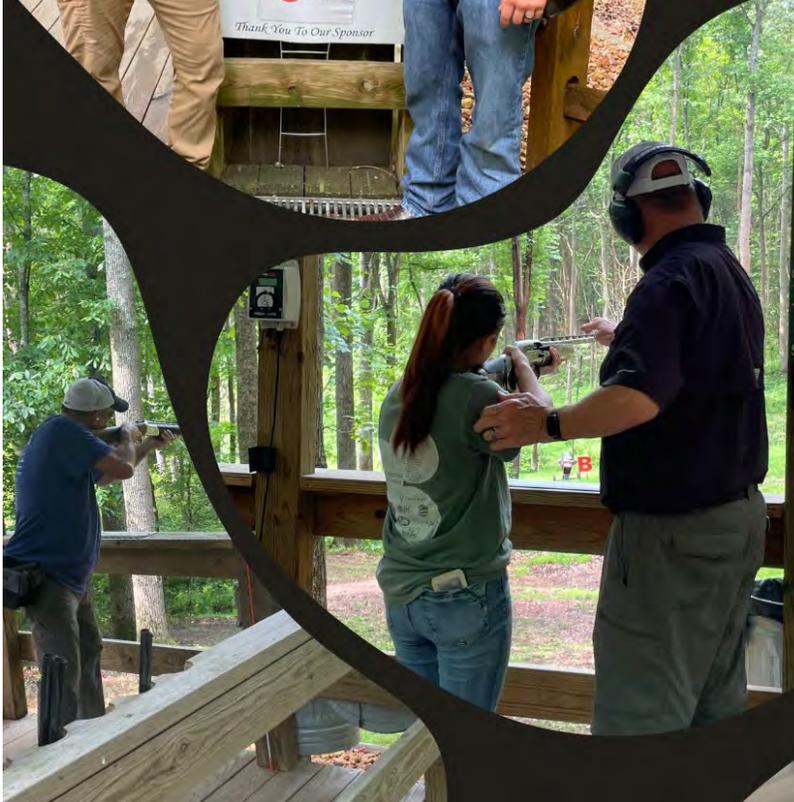
*Highest Placing Youth:  
Royce Trantham*

## SCHOLARSHIP FUNDRAISERS

# Scholarship Fundraisers



## SPORTING CLAYS



## CROSS CREEK CLAYS

SCHOLARSHIP FUNDRAISERS



GOLFING



HERMITAGE GOLF COURSE



## The challenges of implementing RNA vaccines in poultry

March 12, 2024 at [WattAgNet.com](https://www.wattag.net) by Meredith Dawson

Ribonucleic acid (RNA) vaccines could provide a breakthrough in vaccine technology and offer a rapid response to pathogens in the poultry industry. [Click here for full article](#)

## Don't overlook the basics when using coccidiosis vaccines

May 14, 2024 at [ModernPoultry.Media](https://www.modernpoultry.com)

*First in Series* - Most poultry producers today use vaccines to help manage coccidiosis. Whether used year-round, seasonally or as part of a strategic rotation or bio-shuttle program with in-feed medications, the vaccines have proved to be valuable tools for protecting birds against the ubiquitous disease as long as they are managed effectively. [Click here for full article](#)

## Coccidiosis vaccination in layers: Trickle dose is a win-win

April 9, 2024 at [ModernPoultry.Media](https://www.modernpoultry.com) by Daniel Wilson, DVM

*Second in a two-part series* - For many decades, coccidiosis control was relatively easy for the commercial layer industry. Pullets and layers in cages limited the environmental conditions that coccidiosis favors. Although there were some housing styles or movement of birds that presented an opportunity for a coccidiosis challenge, fecal-oral exposure to coccidia was relatively limited. [Click here for full article](#)

## Broiler study shows litter moisture has limited effect on coccidiosis vaccine

June 5, 2024 at [ModernPoultry.media](https://www.modernpoultry.com) by Nicholas Brown, DVM

Coccidiosis vaccination is a critical tool to mitigate economic losses for broiler producers. However, dry litter conditions and low placement densities can complicate successful vaccine replication and subsequent immunizing exposure. [Click here for full article](#)

## Vaccinating for ILT? Scientist explains why two glycoproteins are better than one

May 14, 2024 at [ModernPoultry.Media](https://www.modernpoultry.com)

When poultry veterinarians asked Merck Animal Health to develop a recombinant vaccine that protected against infectious bursal disease (IBD) plus two other viral bugs – infectious laryngotracheitis (ILT) and Marek's disease (MD) – scientist Stephanie Cook knew it would require more than adding an IBD antigen to an existing product line. [Click here for full article](#)

## Poultry Vaccination and Pre-Harvest Monitoring Considerations in View of New USDA Salmonella Initiative: Bill Potter, Ph.D., Food Safety Technical Advisor, Elanco Animal Health

May 16, 2024 at [PoultryProducer.com](https://www.poultryproducer.com) by Jim

Despite extensive efforts by the poultry industry, the Centers for Disease Control (CDC) still attributes a large portion of the roughly 1.35 million annual foodborne Salmonella illnesses to chickens, turkeys and eggs. Therefore, the U.S. Department of Agriculture's Food Safety Inspection Service (FSIS) has proposed renewed focus on three areas to address Salmonella: 1) industry monitoring of incoming flocks for Salmonella, 2) enhancing establishment process controls, and 3) implementing enforceable final product standards. [Click here for full article](#)

## USask Team Develops Aerosol Vaccine to Combat Deadly Poultry Disease

May 30, 2024 at [PoultryProducer.com](https://www.poultryproducer.com) by Sophi Fairman

A University of Saskatchewan (USask) research team has created an aerosol vaccine that protects poultry from necrotic enteritis, a bacterial disease caused by *Clostridium perfringens* type G. This disease leads to a 50% fatality rate among affected chickens and can cause food poisoning in humans who consume contaminated, undercooked chicken meat. [Click here for full article](#)

## H5N1 vaccine shows promise in commercial layer study

May 29, 2024 by [WattAgNet.com](https://www.wattag.net) by Meredith Dawson

The Netherlands-based researchers have been evaluating two vaccines in layers housed in a commercial environment since September 2023. [Click here for full article](#)

# Looking for Ag Lending? Trust the Top Ag Lender In The Nation.



*ICBA named First Financial Bank as the top ag lender in the nation for 2023 in the \$1 billion asset category.*



**Greg Graham**  
Ag Lending Officer, SVP  
(256) 845-4270  
ggraham@ffb1.com



**Clint Russell**  
Ag Lending Officer  
(256) 997-6568  
crussell@ffb1.com



**Hunter Crowson**  
Ag Lending Officer  
(731) 318-2648  
hcrowson@ffb1.com

 **FIRST FINANCIAL BANK**  
**In the Business of YOU.**

2201 Gault Ave. North, Suite G | Fort Payne, AL 35967  
www.ffb1.com | @FFBank1

Approved to offer SBA loan products under SBA's Preferred Lender Program. FSA and Farmer Mac Preferred Lender.

## Mortality Management: A Critical Component of Farm Biosecurity

June 6, 2024 by Dr. Samantha Beaty, TN State Veterinarian, and Eric Medley, Poultry Program Coordinator



Management of poultry mortalities may seem like just another task in daily poultry farm operation. However, the importance of well implemented plans and protocols is critical to farm biosecurity. Failure to implement and adhere to a well-designed mortality management plan/dead bird disposal plan may have unintended consequences that impact the profitability of poultry production.

The most important reason for proper dead bird disposal is the critical role it plays in preventing the introduction and spread of diseases. Poultry carry several diseases that pose significant animal and public health risks. South Carolina's most recent case of Highly Pathogenic Avian Influenza (HPAI) is suspected to have originated from a vulture in close proximity to domestic birds. Proper mortality management reduces the likelihood of disease transmission by preventing scavengers such as rodents and wild birds from accessing potentially infected carcasses and from acting as biological vectors, transmitting diseases directly. Effective mortality management helps to limit the spread of pathogens within the farm environment, protecting the health of both poultry and farm workers.

H5N1, the influenza that is currently causing HPAI in birds, is an emerging disease affecting lactating dairy cattle. There are confirmed links between HPAI outbreaks in poultry and cases of the disease in cows. Poor biosecurity practices between poultry barns and dairy barns have been identified as being a factor in transmission of HPAI to poultry from cows. This cross-species transmission underscores the interconnectedness of agricultural systems and the need for comprehensive biosecurity measures across all sectors.

Additionally, mortality management protocols are required for compliance with most company policy and National Poultry Improvement Plan (NPIP) standards. These standards are designed to safeguard the health and integrity of the poultry industry. Following an NPIP-approved plan provides consistency across industry and helps to ensure trade partners that avian disease mitigation is being performed according to NPIP standards. Failure to comply with appropriate disposal standards can result in suspension from the NPIP program until approved disposal methods are implemented. NPIP participation is critical to producers and industry sectors moving poultry and poultry products interstate and into commerce. This is especially important in disease outbreak situations where proof of a producer's biosecurity plan is required and may be audited before bird movement is allowed.

Mortality management effectively helps to mitigate odors that may generate public complaints. Living near a farm where the smell of decomposing poultry and waste are obvious in the air is less than desirable and can make for strained community relationships. Such complaints can escalate into legal issues and potentially affect its ability to operate.

Poultry mortalities are an expected part of poultry production. Taking proactive measures to prevent bird mortality will decrease the total investment in space and labor requirements associated with mortality management. Robust biosecurity protocols minimize the introduction and spread of diseases. Husbandry practices maintaining optimal living conditions for poultry, like assuring a consistent water supply, controlling heat and humidity, etc., limit mortalities in production systems. Promptly addressing any health issues that arise will help to decrease numbers of birds affected by disease and death.

Proper mortality management is a cornerstone of farm biosecurity and responsible poultry management. By adhering to established protocols and prioritizing disease prevention, farmers can protect the health of their flocks, safeguard their businesses and income, and uphold the integrity of the poultry industry.

## SPECIAL THANKS TO OUR SCHOLARSHIP FUNDRAISER SPONSORS!



KOCH FOODS



## Optimal broiler weight gain tied to body temperature, management details

November 20, 2023 at [ModernPoultry.Media](#)

As most producers know, poultry performance can suffer during periods of high temperature. Modern housing is designed to maintain environmental temperatures within an optimal range, but how does the temperature of individual birds impact their weight gain? [Click here for full article](#)

## Hatching broilers on-farm may improve efficiency, welfare

February 27, 2024 at [ModernPoultry.media](#)

On-farm hatching of broilers may be a viable option to increase efficiency by increasing hatchability and reducing total mortality during rearing, according to scientists in Denmark. [Click here for full article](#)

## Beak to toes: Impact, causes, and prevention of toe pecking in laying hens

March 15, 2024 at [ModernPoultry.Media](#) by Gideon Ajibola and Marisa Erasmus, PhD

Damaging behaviors in poultry include feather pecking, vent pecking and toe pecking. While feather and vent pecking are well-known welfare problems in poultry that have received significant attention from researchers and farmers, toe pecking remains relatively unknown. Therefore, this article aims to shed light on toe pecking. [Click here for full article](#)

## Studies at Tyson Show Variable Lighting, Enrichment Huts Aid Broiler Welfare, Productivity

April 2, 2024 at [ModernPoultry.Media](#)

Continuous lighting is commonplace in commercial broiler houses, but is that what's best for the birds? Providing variable lighting (VL) and other enrichments, such as small huts within a barn, may better meet broilers' needs and result in better welfare, health and productivity. Seong Kang, PhD, poultry science post-doctoral fellow at the University of Arkansas experiment station, has investigated the effects of enrichments in commercial broiler houses through numerous studies at Tyson Foods' Broiler Welfare Research Farm. [Click here for full article](#)



# FARM REAL ESTATE LOANS FROM A FARMER-OWNED LENDER.

A farmer-owned lender knows you need flexibility. That's why we offer a variety of options for our farm real estate loans. If rates drop in the future, you can convert\* to a better one.

And our farmers can invest more in their operation because we put cash back into their pockets through our Patronage\*\* program. In fact, our customers have received more than \$1.25 billion back in cash over the last 8 years. It's how we support our farmers and strengthen their rural communities.

Visit [FCMA.COM/REAL-ESTATE](https://FCMA.COM/REAL-ESTATE) to learn more.

## MSU Researcher Develops Imaging-Based Method of Identifying Defects in Poultry Production

March 29, 2024 at Michigan State University

Yuzhen Lu, Biosystems and Agricultural Engineering assistant professor, is developing a new imaging-based method of identifying muscle myopathy in poultry production. [Click here for full article](#)

## Effectiveness of Different Dusts Against Litter Beetles

April 22, 2024 at [ThePoultrySite.com](http://ThePoultrySite.com) by Chris Wright

Litter beetles (*Alphitobius diaperinus*) are the most prevalent insect species in poultry houses. They are capable of acting as both a vector and a reservoir for a variety of pathogens. Using traditional insecticides for control has limitations due to health concerns and the development of insecticide resistance. [Click here for full article](#)

## Electrostatic could reduce dust in cage-free layer houses

April 24, 2024 at [WattAgNet.com](http://WattAgNet.com) by Elizabeth Doughman

Installing a recirculating electrostatic precipitator could help improve air quality and reduce dust concentrations in cage-free layer houses. [Click here for full article](#)

## Preparing poultry barns for warmer weather

May 22, 2024 at [CanadianPoultryMag.com](http://CanadianPoultryMag.com) by Doug Martin

Hot weather is already here but there's still time to conduct poultry barn maintenance to help protect bird comfort and promote profitability. That said, here are some important things to check to make sure your barn is ready for summer. [Click here for full article](#)



## Heat Stress May Cause Lung Injury in Broiler Chickens

May 1, 2024 at [ModernPoultry.Media](#)

Prolonged exposure to heat stress can lead to respiratory injury in broiler chickens, according to a recent study in China. Heat stress is one of the important environmental stressors in global broiler-chicken farming, as high environmental temperatures can affect efficient animal production and endanger animal welfare. Chickens are susceptible to heat stress during production and breeding due to the birds' high metabolism, fast growth rate and lack of sweat glands. High environmental temperatures can cause severe damage to the health of poultry and affect their production performance, resulting in potentially significant economic losses for commercial broilers. Furthermore, heat stress can cause damage to the lung tissue of broiler chickens by disrupting the integrity of the blood-air barrier and by the activation of cellular signaling pathways leading to an intensified inflammatory response. [Click here for full article](#)

## Static Pressure in Livestock and Greenhouse Facilities

May 11, 2024 at [PoultryProducer.com](#) by Sophi Faiman

This article explores the role of static pressure in livestock and greenhouse production, stressing its importance for efficient ventilation, animal welfare, and maintaining optimal levels. It highlights static pressure as a key factor and advises growers to assess it carefully to ensure both animal welfare and operational efficiency. [Click here for full article](#)

## Researchers Uncover What Makes Some Chickens More Water Efficient Than Others

May 15, 2024 at [MorningAgClips.com](#)

In the first scientific report of its kind, researchers in Arkansas showed that chickens bred for water conservation continued to put on weight despite heat stress that would normally slow growth. Research by the Arkansas Agricultural Experiment Station indicates the specially bred line of chickens developed by Sara Orłowski could save growers thousands of gallons of water and thousands of pounds of food each month without sacrificing poultry health. Orłowski is an associate professor of poultry science with the University of Arkansas System Division of Agriculture. [Click here for full article](#)



# YOUR DRIVE DRIVES US



A small business loan isn't just about the money.  
**It's about making the most of it.**

To learn more, visit us at [liveoakbank.com/poultry](https://liveoakbank.com/poultry)

## Activist Watch Weekly – by Will Coggin

**March 23, 2024**

### Prop 12 Leads to 41% Price Jump

California Proposition 12 [caused a 41% price increase](#) in some pork products, according to a new analysis. Californians have faced 20% higher prices since July, and pork production has declined about 10 percent.

**April 6, 2024**

### Congresswoman Calls For Prop 12 Nullification

Rep. Ashley Hinson (R-IA) published [an op-ed](#) in the Washington Times calling for support of legislation she is sponsoring that would override California Proposition 12. “The opponents of my legislation have engaged in vapid attempts to disguise their radical activism by shrouding themselves in ‘federal overreach’ and ‘competitive markets.’ I am not fooled by them, and you shouldn’t be either,” she writes. (Learn about some of these folks at [PhonyFarmers.com](#).)

**April 13, 2024**

### Study: Fake Meat Worse For Your Health

[A study](#) published in the American Journal of Clinical Nutrition found that people eating plant-based “meat” products had higher blood sugar levels than other groups. Higher blood sugar, the researchers say, is associated with a higher risk of heart problems.

**April 24, 2024**

### Fight Food Inflation

In a new op-ed, this author argues that Congress needs to step in and rebuff state laws like California Prop 12 that are driving food inflation. The piece has been picked up by 11 publications; read it [at the DC Journal](#).

### Researchers Question Plant-Based Meat’s Environmental Benefits

Fake meat companies commissioned lifecycle analyses that they say show dramatic improvements in the environmental impact of their products compared to farm-raised natural meat. But outside researchers say the companies aren’t being transparent about these analyses and that they can’t replicate them.

**June 1, 2024**

### Poll: Vast Majority Don’t Want to Eat Lab Meat

The Center for the Environment and Welfare has [released new polling](#) on public sentiment about lab-grown meat. Across the political spectrum, a majority of Americans support state restrictions on the sale of lab-grown meat and oppose its inclusion in school lunch programs.

### "Better Chicken" Worse for the Environment

[An analysis in the EU](#) has found that changes to poultry production demanded by animal rights extremists would have significant environmental costs: “a 35.4% increase in water consumption... a 35.5% increase in feed consumption [and] a 24.4% rise in greenhouse gas emissions per kilogram of meat produced.” These findings are similar to those of [an analysis done in the US](#).

### Americans Don’t Want Lab-Grown Meat Shoved Down Their Throats

The Hill recently published an op-ed from a vegan investor complaining about lab-grown meat bans. Read [Jack Hubbard’s response](#) in The Hill.

**June 8, 2024**

### Lab-Grown Meat Restrictions Have Bipartisan Support

While some media pundits have claimed opposition to lab-grown meat is only an issue on the political right, Jack Hubbard discusses how lab-grown meat is facing intense skepticism among Democrats, Independents, and Republicans. [Read Hubbard’s latest](#) in the Washington Times.

### DoD Seeks to Fund Lab-Grown Meat

A Department of Defense consortium announced it will be handing out grants to alternative protein projects. The grants will be up to \$2 million and will be made through BioMADE, a public-private bio-manufacturing consortium funded by the DoD. The published project call ([read here](#)) specifically references “novel cell culture methods suitable for the production of cultivated meat/protein” (i.e., lab-grown meat).



**POULTRY  
SOUTH.COM**

*The Leaders in Marketing Poultry Farms!*

256-475-0490

psteam@poultrysouth.com

**www.poultrysouth.com**

## Study: Consumer distrust of cultivated meat remains strong

April 12, 2024 at [MeatingPlace.com](https://www.meatingplace.com) by Melissa Sue Sorrells

Purdue University's monthly [Consumer Food Insights Report](#) for March looks at U.S. consumers' attitudes toward cultivated meat, finding animal proteins remain the preferred choice. [Click here for full article](#)

## No heart benefits from alt-meat: study

April 12, 2024 at [Alt-Meat.net](https://alt-meat.net) by Melissa Sue Sorrells

No significant heart health benefits found with plant-based meat over animal meat. [Click here for full article](#)

## Plant-Based Food Sales Fall to \$8.1B as Consumers Demand Lower Prices and Higher Quality

April 22, 2024 at [FoodDive.com](https://www.fooddive.com) by Elizabeth Flood

Plant-based meat and seafood sales declined in 2023 for the second year in a row, according to the Good Food Institute's State of the Industry report. Retail plant-based food dollar sales were \$8.1 billion in 2023, a slight decline from \$8.2 billion in 2022, indicating that plant-based foods are still falling short on consumer expectations of taste, texture and affordability. Though the space has made strides to reach more people, only 15% of U.S. households purchased its products in 2023, compared to 19% in 2022. [Click here for full article](#)

## FDA/USDA aim to 'clarify' regulation of cultivated meat industry

May 9, 2024 at [MeatingPlace.com](https://www.meatingplace.com) by Peter Thomas Ricci

The USDA and the FDA announced plans to "clarify and provide guidance on the regulation of cultured animal cell foods," including food labeling and facility inspection. [Click here for full article](#)

# Heidy

Mobile grader for increased uniformity of broiler breeder pullets

Controlling the weight of your birds to ensure flock uniformity at the point of lay is extremely important. The **Heidy** mobile grading scale from Big Dutchman makes the weighing and grading process simple and efficient.

**Contact your local distributor or sales representative to learn more.**

**ASK ABOUT IT AT A BIG DUTCHMAN DISTRIBUTOR NEAR YOU:**

Reliable Poultry  
1235 Manufacturers Row  
Trenton, TN 38382  
Phone: (731) 470-4470

Volunteer Poultry  
5823 Water Level Highway  
Cleveland, TN 37323  
Phone: (423) 473-3977

Volunteer Poultry  
12941 David Crockett Pkwy.  
Huntland, TN 37345  
Phone: (931) 469-7486



## 2024 US per capita broiler consumption to top 100 pounds

April 5, 2024 at [WattAgNet.com](https://www.wattag.net) by Terrence O'Keefe

Per capita consumption of meat from broilers in the U.S. continues to increase, but turkey consumption remains down from its peak decades ago. [Click here for full article](#)

## University researcher develops real-time freshness monitoring for meat products

April 9, 2024 at [MeatPoultry.com](https://www.meatpoultry.com) by Rachael Oatman

Auburn University announced that one of its associate research professors was awarded two patents for innovations designed to reduce waste, including one developed for meat products. [Click here for full article](#)

## Understanding Chicken Sounds with AI to Improve Poultry Welfare

May 1, 2024 at [PoultryProducer.com](https://www.poultryproducer.com) by Sophi Fairman

Professor Suresh Neethirajan and his research team are working on a unique project. They're using artificial intelligence (AI) to understand the sounds chickens make, aiding farmers and the agriculture sector in enhancing poultry care. The study, "Cracking the Code of Clucks – How AI Unravels Chicken Chatter Secrets," focuses on translating the variety of sounds produced by chickens. Applying Natural Language Processing (NLP), a form of AI, the team aims to turn these noises into actionable insights for improving poultry environments. [Click here for full article](#)

## US 'Chicken Sandwich Wars' battle continues with antibiotic announcement

May 3, 2024 at [PoultryWorld.net](https://www.poultryworld.net) by Treena Hein

Chick-Fil-A, one of the 2 US restaurant chains that lead chicken sandwich sales across the nation, has recently backtracked on its no-antibiotics-in-chicken pledge, a move that company leaders hope will not negatively affect the chain's position in the highly-competitive so-called 'Chicken Sandwich Wars'. [Click here for full article](#)

## Childcare, Flexible Schedules: How Tennessee Companies Are Adapting for Working Parents

May 30, 2024 at [YahooFinance.com](https://www.yahoo.com/finance) by Hadley Hitson

It's been almost a year since Tyson Foods opened its first on-site childcare facility in Humboldt, a town with a chicken-processing facility around the midway point between Nashville and Memphis. The addition makes it a leader among dozens of Tennessee companies that are increasingly prioritizing the wants and needs of working parents to incentivize them to stay in the workforce despite rising childcare expenses. As Tyson's childcare center opened last year, the labor shortage reached 100,000 unfilled jobs across Tennessee, according to a Tennessee Business Leadership Council report. The \$21 billion food company cited rising childcare costs and its goal of improving recruitment and retention rates as reasons for the venture. [Click here for full article](#)

## TTU adds Poultry Science concentration



TN Tech launched its Poultry Science Concentration in the Fall of 2023. This concentration focuses on poultry nutrition, anatomy and physiology, management, and quality control. For more information, please see the following link: [TN Tech Poultry Science](#). TTU student Antonio Fuentes led their most recent experiment investigating the effects of biochar as a litter amendment on broiler growth performance. He will be traveling to Louisville in July to present his work at the Poultry Science Association's Annual Meeting.



### ClearViewEnterprises

Clear View Enterprises, LLC (CVE) was formed in 2004. We have taken over 40 years of service and experience, combined with our vendors' technical support teams, to bring you — the poultry producer — a complete line of nutritional supplements, insecticides, rodenticides and sanitation products.

*Over 40 years of service with your performance in mind*

710 Industrial Blvd • Gainesville, GA 30501  
Contact Johnny Smith at (770) 712-0015  
or visit our website [www.cvear.com](http://www.cvear.com)

# 2024 SERVICE TECH WORKSHOP

LEBANON, TN - FARM BUREAU EXPO CENTER



## USDA Announced Final Determination to Declare Salmonella an Adulterant in Raw Breaded Stuffed Chicken Products

April 26, 2024 at [USDA.gov](https://www.usda.gov)

The U.S. Department of Agriculture's (USDA) Food Safety and Inspection Service (FSIS) announced its final determination to declare Salmonella an adulterant in raw breaded stuffed chicken products when they exceed a specific threshold (1 colony forming unit (CFU) per gram or higher) for Salmonella contamination. This final determination is part of FSIS' broader efforts to reduce Salmonella illnesses associated with the raw poultry supply in the United States. FSIS intends to address Salmonella contamination in other raw poultry products later this year. [Click here for full article](#)

## NCC Says New Salmonella Regulation Sets Dangerous Precedent

April 28, 2024 at [MorningAgClips.com](https://www.morningagclips.com) by National Chicken Council

The U.S. Department of Agriculture's Food Safety and Inspection Service has announced its final determination to declare *Salmonella* an adulterant in raw breaded stuffed chicken products when they exceed a specific threshold for *Salmonella* contamination. [Click here to read full article](#)

## US Department of Labor Finalizes Farmworker Protection Rule

April 26, 2024 at [FeedStuffs.com](https://www.feedstuffs.com)

The Department of Labor announced a final rule to strengthen protections for farmworkers. The rule targets vulnerability and abuses experienced by workers under the H-2A program that undermine fair labor standards for all farmworkers in the US. The H-2A program allows employers to hire temporary foreign workers when the department determines there is a lack of able, willing and qualified US workers to perform the agricultural labor or services, and that employing temporary labor will not adversely affect the wages and working conditions of similarly employed US workers. [Click here for full article](#)



**READY TO BUILD  
OR REMODEL?  
RELY ON US.**



105 Anthony Lane  
SHELBYVILLE, TN 37160

(931) 680-0742  
[www.hogslat.com](http://www.hogslat.com)

VAXXILIVE™  
COCCI 3



## GIVE YOUR FLOCK A HEAD START.

In the race against time, get a lead on protecting your flock from coccidiosis. The proven formula of VAXXILIVE™ COCCI 3 has strains that provide optimal protection, result in less oocyst production, and lead to earlier immunity.<sup>1-3</sup> Experience reliable protection and unmatched support when you choose Boehringer Ingelheim.

Learn more at [poultryhealthusa.com](https://poultryhealthusa.com)



• Original Solutions

References:  
1-3. Data on file at Boehringer Ingelheim.

Vaxxilive™ is a trademark of Boehringer Ingelheim Vetmedica GmbH, used under license. ©2022 Boehringer Ingelheim Animal Health USA Inc., Duluth, GA. All Rights Reserved. US-POU-0074-2022A

## Congress urges EPA to withdraw proposed wastewater rule

March 12, 2024 at [MeatandPoultry.com](https://MeatandPoultry.com) by Rachael Oatman

US Senators Deb Fischer (R-Neb.) and Joni Ernst (R-Iowa) led a letter to the Environmental Protection Agency (EPA) to ask the agency to withdraw its proposed rule for wastewater discharged by meat and poultry processors. [Click here for full article](#)

## Industry Associations Push Back on EPA Wastewater Guidelines

March 27, 2024 at [MeatandPoultry.com](https://MeatandPoultry.com) by Bob Sims

An alliance of meat and poultry industry associations said the Environmental Protection Agency (EPA) has underestimated the cost of its proposed wastewater guidelines. The Meat and Poultry Products Industry Coalition (MPP), made up of the American Farm Bureau Federation, the Meat Institute, National Chicken Council, National Pork Producers Council, National Turkey Federation, North American Renderers Association and the U.S. Poultry & Egg Association, believes the guidelines will cost hundreds of millions more than the estimate, eliminate tens of thousands of jobs and close many processing facilities, resulting in hardship for livestock and poultry producers. [Click here for full article](#)

## EPA Announces Standard, \$1B Investment to Address PFAS in Drinking Water

April 10, 2024 at [EPA.gov](https://EPA.gov)

As part of the Administration's commitment to combating PFAS pollution, EPA announces \$1B investment through President Biden's Investing in America agenda to address PFAS in drinking water. The Biden-Harris Administration issued the first-ever national, legally enforceable drinking water standard to protect communities from exposure to harmful per- and polyfluoroalkyl substances (PFAS), also known as 'forever chemicals.' Exposure to PFAS has been linked to deadly cancers, impacts to the liver and heart, and immune and developmental damage to infants and children. This final rule represents the most significant step to protect public health under EPA's PFAS Strategic Roadmap. The final rule will reduce PFAS exposure for approximately 100 million people, prevent thousands of deaths, and reduce tens of thousands of serious illnesses. [Click here for full article](#)

## Prop 12's Winding Path to Full Implementation

March 26, 2024 at [MorningAgClips.com](https://MorningAgClips.com)

Since being passed by California voters in November 2018, Proposition 12 (Prop 12) has faced a series of legal challenges that have led to uncertainty and delays in the implementation and enforcement of its requirements for the treatment of breeding pigs. A new Special Issue of *ARE Update* sheds light on its contentious path to eventual full implementation on January 1, 2024 and analyzes how these delays have affected the retail and wholesale pork market. Preliminary data suggest that Prop 12, and the uncertainty surrounding it, have led to an average retail price increase of 20% for covered pork products (i.e., those included under the regulation, mainly uncooked cuts of pork), as well as significantly higher prices for wholesale pork products during the implementation period and as hog farms nationally continue to adjust to the law. [Click here for full article](#)

## Over 900 ag groups advocate for 'federal fix' against Prop 12

May 23, 2024 at [MeatPoultry.com](https://MeatPoultry.com) by Rachael Oatman

Led by the National Pork Producers Council (NPPC) and the American Farm Bureau Federation (AFBF), the letter sent on May 21 to House Agriculture Committee Chairman G.T. Thompson (R-Pa.) and Ranking Member David Scott (D-Ga.) laid out several arguments for damaging consequences of Prop 12. [Click here for full article](#)

## Do Californians regret voting for Proposition 12?

June 5, 2024 at [FeedStrategy.com](https://FeedStrategy.com) by Roy Graber

NPPC VP believes if residents would have known about supply, price and environmental consequences, they would have voted against it. [Click here for full article](#)

## Federal officials need to know ag committees are important

May 8, 2024 at [WattAgNet.com](https://WattAgNet.com) by Roy Graber

When you meet with your senator or representative, make sure they know how much you care about agriculture. [Click here for full article](#)

## SEC explains final rules on climate disclosures

March 12, 2024 at [MeatandPoultry.com](https://meatandpoultry.com) by Jeff Gelski

The US Securities and Exchange Commission on March 6 adopted rules that require public companies to provide certain climate-related information in their registration statements and annual reports. The rules require disclosing Class 1 and Class 2 emissions in some instances but not Class 3 emissions. [Click here for full article](#)

## 'Approved by FDA' now required on animal drug labels

April 5, 2024 at [FeedStrategy.com](https://feedstrategy.com)

This statement is intended to help veterinarians, food animal producers, pet owners and others clearly identify approved animal drugs and distinguish them from drugs that do not have the benefit of FDA approval. [Click here for full article](#)

## Will Congress Pass a New Farm Bill in 2024?

June 3, 2024 at [AqWeb.com](https://aqweb.com) by Tyne Morgan

The farm bill finally saw some movement in Washington last month, but the majority of agricultural economists still don't think a farm bill will be passed until 2025, with some even saying it could be 2026. [Click here for full article](#)

## House ag committee proposes labor solutions

March 11, 2024 at [MeatandPoultry.com](https://meatandpoultry.com) by Rachael Oatman

The House Committee on Agriculture is working to relieve labor shortages that have seriously impacted producers in the United States, specifically through changes to the H-2A guest worker program. [Click here for full article](#)

## DOL Finalizes Rule on Representation During OSHA Inspections

March 29, 2024 at [FeedandGrain.com](https://feedandgrain.com)

The U.S. Department of Labor announced a final rule to be published in the Federal Register on April 1, clarifying employees' rights to authorize a representative during Occupational Safety and Health Administration (OSHA) inspections. Effective May 31, this rule provides clear guidelines on who can accompany OSHA compliance officers during workplace inspections. [Click here for full article](#)

## Labor Dilemma: A Force to Reckon With

April 23, 2024 at [MeatPoultry.com](https://meatpoultry.com)

Access to an adequate workforce is a decades-old challenge facing meat and poultry processors that has intensified with rising production costs. Forecasts from the Bureau of Labor Statistics (BLS) of the US Department of Labor do not show an end to this negative trend. [Click here for full article](#)



1235 S MANUFACTURERS ROW  
TRENTON, TN  
731-470-4470

115 NORTHSIDE DR.  
MAYFIELD, KY  
270-650-6815



Posted May 7, 2024

**UTIA** INSTITUTE OF  
AGRICULTURE  
THE UNIVERSITY OF TENNESSEE

# UT Institute of Agriculture Invests in Premier Poultry Research Facility

*State's Land-grant to Support Poultry Production and Processing*



On May 2, UT AgResearch celebrated the official groundbreaking for a next generation poultry research and education facility at the Middle Tennessee AgResearch and Education Center. Joining in the ceremony, from left to right, are Eric Mayberry and Bryan Wright, Tennessee Farm Bureau President and Executive Vice President, respectively; Jeff Aiken, Deputy Commissioner of the Tennessee Department of Agriculture; Shelia Butt, Maury County Mayor; Shane Joyner, Vice President for Live Operations, Tyson Foods; Kevin Thompson, UT AgResearch Center Director; Jim Hagaman, Spring Hill Mayor; Deborah Crawford, Vice Chancellor, UT Office of Research, Innovation and Economic Development; Keith Carver, Senior Vice Chancellor and Senior Vice President, UT Institute of Agriculture; Randy Boyd, UT System President; Charlie Hatcher, Tennessee Commissioner of Agriculture; and Hongwei Xin, Dean, UT AgResearch. Photo by T. Cronin, courtesy UTIA.

[See full story on page 46](#)

## Lighting Programs for Broiler Chickens Continue to Evolve

September 2023 by Tom Tabler, et al

Light is a critical environmental factor for broiler chickens, affecting numerous aspects of production such as behavior, health, physiology and welfare. The ability of light to influence production performance, growth and wellbeing of poultry is well documented and has attracted the attention of researchers for over 100 years (Lashley, 1916; Bowlby, 1957; Cherry and Barwick, 1962). In general, broilers are raised indoors in large flocks where food, water and environment are controlled to provide for their basic physiological needs (Newberry, 1999).

However, this is a very different environment than that experienced by their junglefowl ancestors from which modern broiler chickens have evolved. In nature, chickens are exposed to a variety of circumstances and environmental conditions including varying day lengths and light intensities (Newberry, 1999; Collias and Collias, 1996). Lighting is a key management tool in broiler production, however, research to provide detailed characterizations of the internal lighting environment of commercial broiler houses is relatively recent (Linhoss et al., 2023). Use of LED lights have been demonstrated to improve efficiency and production performance, although further adaptation of LED technology may yield additional improvements by providing a more appropriate lighting environment for broilers (Aldridge, 2019). Recent reports have suggested that the optimal light environment for broiler production may not be a uniform distribution of light intensity (Davis et al., 1999; Raccoursier, 2016; Aldridge et al., 2022; Thornton and Tabler, 2023).

### Light wavelength and intensity

Light is an important management factor for broiler production that can affect broiler growth, diurnal rhythms, behavior and welfare (Deep et al., 2010, 2012; Schwan-Lardner et al., 2012a, b, 2014). The lighting program remains of critical importance because lighting has been intimately associated with not only the establishment of rhythm and synchronous physiology of broiler chickens, but also the secretion of hormones associated with broiler maturation and growth (Wu et al., 2022). An appropriate lighting regimen, including proper source of lighting, intensity, duration and wavelength (color) of light, is critical to improve the growth performance and welfare of broilers (Wu et al., 2022). Light wavelength also influences fear and stress levels (Franco et al., 2022). Broilers raised under blue light had lower fear levels, assessed through tonic immobility, than birds raised under white light (Mohamed et al., 2014, 2017). Aldridge et al. (2021) reported that broilers provided a dual light (warm (2,700 K) and cool (5,000 K)) offering exhibited a clear preferential pattern for warm light during the first and last hour of a 16- hour light period. Impacts on bird behavior may suggest that lighting programs with varying wavelengths and light intensities may be a usable tool to improve welfare and production aspects. However, it is important to understand the origin of the behavioral changes and whether they are related to visual ability or another critical factor (Wu et al., 2022).

For example, leg health is one of the most prevalent causes of culling and late mortality in a flock during the grow-out of commercial broilers. Numerous researchers have indicated that increasing locomotor activity in broilers may improve bird welfare (Bizeray et al., 2002; Kristensen et al., 2004; Kang et al., 2020, 2023). Several studies addressing broiler leg health suggest that the stimulatory effect of bright light on locomotor activity can improve leg condition and thus welfare (Newberry et al., 1988; Shields et al., 2005; Blatchford et al., 2009). Kang et al. (2023) reported increased volunteer and natural behaviors and physical activity, which may improve footpad condition and leg health, under a variable broiler lighting program.

The effects of light intensity provided by artificial lighting on commercial broilers has been extensively studied in the past (Olanrewaju et al., 2006). Variable light intensity studies have indicated that when birds have a dual light choice they consumed more feed in the higher-intensity light area (20 lux (1.85 fc)) than in the lower intensity area (2 lux (0.19 fc)) (Raccoursier et al., 2019; Kang et al., 2020). While there was no significant difference in production parameters (body weight and feed conversion ratio), the results of central welfare indicator studies suggested better central welfare in variable lighting intensity-treated birds (Kang et al., 2020). Fewer studies have examined the effect of natural light on performance, welfare, health and behavior. However, de Jong and Gunnink (2019) reported no difference in welfare indicators (lameness, footpad dermatitis, hock burn, cleanliness and injuries) between birds on a commercial farm provided natural light/enrichments and a control with no enrichments or natural light. De Oliveira Sans et al. (2021) reported that broilers preferred a natural light treatment (280 to 900 lux (26 to 84 fc)) to an artificial lighting only treatment (22 to 44 lux (2 to 4 fc)) after 18 days of age. Bailie et al. (2012) reported that broilers grown in a commercial house and provided natural light (average of 85.2 lux (8 fc)) showed increased activity and leg health when compared to broilers grown under artificial lighting only (average of 11.4 lux (1.05 fc)). Lower light intensities have been shown to reduce activity, cannibalism and scratching, whereas higher levels promote increased activity (Cherry and Barwick, 1962; Newberry et al., 1988; Kristensen et al., 2006; Rault et al., 2016), which may explain some of the differences seen in studies on natural light.

An area receiving increased attention in recent years has been the uncontrolled ingress of natural light through tunnel exhaust fans, sidewall inlets and other house components which increases the temporal and spatial variability of light intensity (Miragliotta et al., 2006; Purswell and Olanrewaju, 2017; Linhoss et al., 2020). Linhoss et al. (2020) reported that light intensity at the fan end of a broiler house reached a peak of 440 lux (41 fc) and remained at over 100 lux (9.2 fc) for an entire day. Purswell and Olanrewaju (2017) reported significantly higher feed conversion ratio and feed consumption for birds raised in a variable light treatment, designed to mimic the huge variation in light intensity through tunnel fans, when compared to birds raised under a constant prescribed light intensity (2.5 lux (0.2 fc)). Linhoss et al. (2022) reported light intensity values as high as 6,000 lux (557 fc) in a curtain-sided natural light broiler house compared to a traditional artificial lighting system, over 600 times higher than levels generally accepted by the broiler industry today.

### Gradient lighting

There is increasing evidence that indicates focusing on determining a single uniform light intensity and color (Figure 1) to be applied evenly across time (age) and space (the rearing environment) may have been misguided (Aldridge, 2019). *(continued on next page)*

With the poultry industry's increased focus on animal welfare, gradient lighting programs (Figure 2) that provide bright light levels near the feed lines and much lower light levels near the walls and allow broilers to "choose" their preferred light level are attracting much greater attention.

Broiler chickens have shown a preference for higher intensity light when they are performing active behaviors (such as eating) but prefer dimmer areas when resting (Newberry et al., 1985; Berk, 1995; Raccoursier et al., 2019; Kang et al., 2020). Light intensity has been shown to affect the activity of birds, but most studies have focused on constant and uniform light intensities to determine their effect on welfare and performance (Kang et al., 2023). However, Blatchford et al. (2012) reported a strong effect of contrasting light intensities on the behavior and health of broilers and suggested that high contrast in light intensity was associated with strong daily rhythms of behavior.

Vision is likely the dominant sense in domestic poultry, and the evolution of vision was determined, at least in part, by the natural light available (Prescott et al., 2003), with its gradient combination of direct sunlight and shadows, in the jungles of Southeast Asia where the ancestors of today's broilers originated. However, broiler chickens in commercial management settings today are typically housed in dim lighting because it is presumed to improve productivity and feed conversion efficiency, as well as reduce overall activity and injurious pecking episodes (Prescott and Wathes, 1999; Alvino et al., 2009). If birds perceive different light intensities in different ways, this may influence their behavior. Manser (1996) suggested that light intensities between 5 and 22 lux (0.5 to 2 foot-candles (fc)), currently used for broilers and turkeys, may contribute to a decrease of their engaging in exploratory behavior and social interactions and high prevalence of leg abnormalities, mortality, eye abnormalities, breast blisters in growing birds and fearfulness. Therefore, the potential for the enrichment of the perceived environment and, consequently, for improving bird welfare through gradient lighting seems to warrant additional investigation.



*Figure 1. Uniform light levels have been a poultry industry standard for years.*



*Figure 2. Gradient lighting for broilers is attracting much attention today.*

Numerous reports indicate that chickens have preferences for specific light intensities. When provided a choice of light intensities of 6, 20, 60 and 200 lux (0.5, 1.85, 5.5 and 19 fc) in a choice system, two-week-old broilers preferred bright light (200 lux (19 fc)) for all behaviors (Davis et al., 1999). However, by six weeks of age, broiler chickens exhibited active behaviors under 200 lux (19 fc) but resting and perching behaviors under 6 lux (0.5 fc) (Davis et al., 1999). Raccoursier et al. (2019) reported that broiler chickens given a lighting choice were found disproportionately dispersed with greater numbers in areas at 20 lux (1.85 fc) where feed and water were available and to poorly lit (~1 lux (0.1 fc)) areas with neither feed nor water compared to areas with feed and water and lit at 5 lux (0.5 fc). Kang et al. (2023) reported that a variable light intensity program increased volunteer natural behaviors and physical activity.

Performance data, including increased daily weight gain and a lowered feed conversion ratio and results of brain welfare indicator gene expression, indicated the beneficial effect of a variable light intensity lighting program on performance and welfare. These studies tend to suggest that a uniform light intensity that the industry has utilized for years may not be the best option for broiler chickens. That message is not being lost on lighting manufacturers, as there are now multiple gradient lighting options available on the market and others in the testing phase.

### Summary

Lighting programs in the broiler industry continue to evolve and are far from being an exact science. Responses to shifting consumer demands for alternative rearing programs and improved welfare conditions have resulted in a re-evaluation of lighting programs by the commercial broiler industry in recent years. A variety of lighting programs are currently in use or being studied across the broiler industry. These range from going back to walls and windows that allow use of natural light to the most recent concept of gradient or variable intensity lighting that allows birds to "choose" the level of light they desire throughout the grow-out. This often means higher intensity lighting near the feeders and drinkers where activity levels are high and a much lower light level near the walls for resting where the activity level is lower. Despite our knowledge of the importance of light to broiler chickens, the industry continues to search for the ideal lighting program that can provide the production performance, growth, health and welfare benefits we desire. That search challenges lighting manufacturers to continually develop new state-of-the-art lighting options that can meet the needs of a changing poultry industry. Continued collaboration between lighting manufacturers and the poultry industry is critical to address lighting challenges and to allow for the continuing improvement of broiler lighting practices. *References available on request.*

# HALF THE LIGHTS WATERPROOF LOW-PROFILE LONG LIFE

**Better Light. Better Life!**



**Preferred by birds  
everywhere!**



**AG LIGHTING**  
INNOVATIONS  
[www.poultrylights.com](http://www.poultrylights.com)

## Can chicks have a dark period in the first week?

December 5, 2023 at [WattAgNet.com](http://WattAgNet.com) by Garret Ashabranner, Brian Fairchild, and Mike Czarick



UNIVERSITY OF GEORGIA  
EXTENSION

A recent project evaluated the impact on broiler body weight, feed consumption and feed conversion when birds were provided six hours of darkness throughout the entire six-week flock while compared to a control that had 24 hours of light for the first seven days.

Poultry light programs are a popular topic of conversation as a part of managing the poultry house environment. However, if a poll of light programs was conducted, one would find that there are many different variations in the light programs. Features of light such as photoperiod length, light intensity and even spectrum vary a lot among different operations and farms. Light is critical in avian reproduction and is managed closely in pullets, breeders and layer housing. Light is also important in broilers. For example, bird activity is correlated with light intensity. Light management can impact poultry behavior, physiology and performance.

The features of light management that are important to broiler house environmental control are the length of the photoperiod, dark period, intensity, uniformity of light intensity and spectrum. A lot of work has focused on the aspects of light with regards to these features during broiler grow out, but interestingly very little work has been published on lighting programs during the brooding period. Most if not all of the studies we have read start the light treatment around seven days of age. Traditionally, broiler growers, as well as other poultry growers (turkey, quail, pullet) have provided chicks continuous (24 hours) or near continuous (22-23 hours) light for the first seven days.

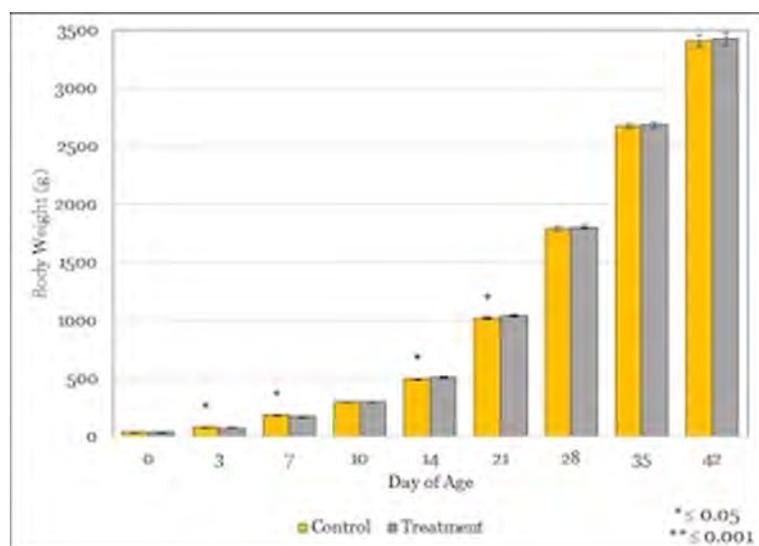
### Comparing lighting programs impact on chick growth

A recent project evaluated the impact on broiler body weight, feed consumption and feed conversion when birds were provided six hours of darkness throughout the entire six-week flock while compared to a control that had 24 hours of light for the first seven days. On Day 8, the control birds were provided a six-hour dark period. The birds were fed a standard broiler starter, grower and finisher diet. The light intensity was maintained at 30 lux throughout the study. In addition to bird performance, blood samples were taken two times per day in the middle of the dark and light periods to measure melatonin and corticosterone.

Melatonin is a hormone produced by the pineal gland. It is well documented in previous studies that melatonin concentrations increase during the dark period. Previous research has shown that melatonin impacts several physiological processes that include but are not limited to immunity, respiration, thermoregulation and mediates the entrainment of circadian activity rhythms. Melatonin has also been shown to have antioxidant properties which may be beneficial during times of stress. With these results in mind, it may be possible that optimizing melatonin concentrations soon after hatching and placement in the broiler house might be beneficial for the birds.

Corticosterone is a hormone produced by the adrenal glands and the concentration increases during periods of stress. When broilers are stressed, corticosterone concentrations increase, and this can result in reduced feed consumption, reduced growth, increased fat and reduced breast muscle yield. Corticosterone was measured and analyzed in this study to determine if providing a dark period influence broiler stress.

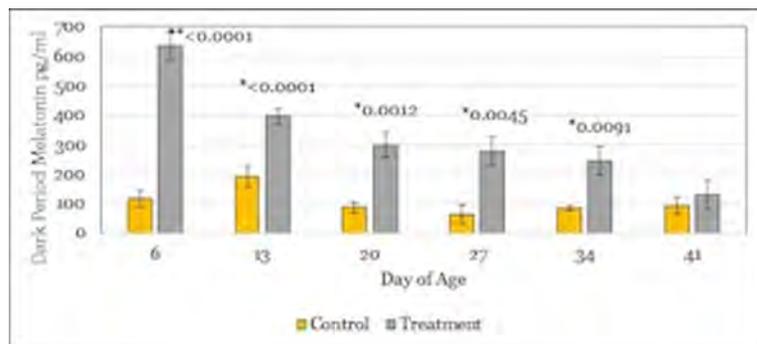
The broiler chicks in the rooms with the dark period during brooding grew slower in the first week and had lower body weights at Day 7. However, by Day 10, the birds provided with the dark period weighed more than the birds that had 24 hours of light. The birds in the dark period during brooding continued to weigh more than the birds in the in rooms with continuous light during the brood period through three weeks of age. By the end of the 6-week study there were no differences between the birds provided a dark period and those provided continuous light during the first 7 days.



This chart compares growth rate over time for control birds who had a 24 hours of light access and treatment birds with a six hour dark period over the first seven days. Day 8 onward all birds had a six hour dark period. UGA Poultry Housing Lab

Some might think that reducing growth in the first week is a negative result, but it might be beneficial to these chickens. In slowing down the growth rate in the first week, that energy can be diverted to development of other systems that will benefit the bird more when it starts to gain more weight. Systems that are still maturing when chicks are placed on the farm include immune, respiratory, skeletal strength, thermoregulation and the digestion.

After analyzing the blood samples, no differences in corticosterone were observed. These results suggest that providing broilers a dark period did not cause stress. However, melatonin concentration was significantly higher in the samples collected in both the dark and light period from birds that were provided the dark period in the first week compared to those that had continuous light. Not only were these levels higher in the birds during the first week, but they remained higher after the control birds were provided a dark period. This difference in melatonin was maintained through five weeks of age. In the last week there were not any melatonin differences between the birds provided a dark period and those that had continuous light during the first week. (continued on next page)



*Birds provided a dark period in the first week had higher concentrations of melatonin through 5 weeks of age even though the control birds that received continuous light were given a dark period from Day 8 through the end of the study. Birds provided a dark period in the first week had higher concentrations of melatonin through 5 weeks of age even though the control birds that received continuous light were given a dark period from Day 8 through the end of the study. UGA Poultry Housing Lab*

The melatonin results indicate that the broilers may benefit from having a dark period. There may be long term effects on bird health and additional studies will be conducted in the near future to evaluate this.

The current study was conducted in a research pen study. More work is needed in this area to determine if similar results can be obtained in birds raised in broiler houses on a farm and determine if there is any impact on livability and number of lame birds. Field trials are under way on a four-house farm in Northeast Georgia.

### Summary

In summary, the results from the two identical six-week trials in this study suggest that providing broiler chicks a dark period from the first day they are placed on the farm does not have any negative effects on market weight or feed conversion. While it may not be a lot, some power can be saved as the lights would not be operating for 42 hours during the first week.

In addition, it is important to remember that chicks are immature at hatch and they are maturing during the first week on the farm. They spend a lot of time sleeping. It is not unusual to see 30% or more of the chicks resting when entering a house during the first week at any given time of the day under continuous light programs. Previous studies have shown that it takes a minimum of a four-hour dark period for the increased melatonin concentration to occur. When the melatonin results are considered, it may be more beneficial to broiler chicks to have a four-to-six-hour dark period upon placement.

Based on these results, providing a dark period during brooding did not have any negative consequences.

## Blood biomarkers could drive broiler nutrition decisions

March 7, 2024 at [WattAgNet.com](https://www.wattagnet.com) by Elizabeth Doughman

Emerging technologies could help predict health issues or nutritional deficiencies earlier than before.

Artificial intelligence (AI) and machine learning could analyze poultry blood biomarkers to detect potential performance and health challenges, leading to more proactive, data-driven decisions about bird nutrition.

“This technology uses machine learning to take all the data that’s collected – not just blood data, but also seasonality, the breed, the sex of the bird and other metrics – and feed it into the neural network technology that makes predictions and then beyond that even prescriptive type of diagnostics,” explained Matthew Livingston, Verax business development manager, [dsm-firmenich](https://www.dsm-firmenich.com).

“It’s not just what’s going on with the bird, but what can we do to improve it based on everything we know.”

### Blood biomarkers and machine learning

Machine learning and AI can monitor trends and changes in blood biomarker levels, which serve as an early indicator of potential diseases of the bird. Examples of blood biomarkers include calcium, sodium chloride, protein, hemoglobin, etc.

Inputting information about the biomarkers into a neural network helps train the technology. Neural networks, a form of machine learning, uses AI to teach a computer to process data like the way a human brain would.

In other words, as the neural network learns on a model or blood biomarker dataset, it can then highlight and even predict when indicators of broiler health issues nutritional deficiencies start to appear in a flock in real-time. The technology can also recommend nutritional strategies to help manage bird health based on that data.

Producers can use this early warning system to proactively make feed and other management changes to prevent outbreaks before they start.

“In an ideal world, we do this about four times a year. We do know that we have seasonality differences, especially with things like electrolytes and heat stress,” Livingston said. “The machine will show us the pattern. It may be things that are obvious, but there’s always a handful of things that we didn’t even think of logically.”

## Commodity Report

June 6, 2024 at [Egg-News.com](https://www.egg-news.com) by Simon M. Shane

### OVERVIEW

Prices for corn, soybeans and soybean meal were changed only fractionally this past week. Prices were influenced by technical selling arising from geopolitical concerns, estimates of domestic U.S. availability and revised projections for crop sizes in Brazil and Argentina. Secondary factors included disruption in shipping in the Red Sea and Panama Canal, carryover from the 2023 U.S. crop, export orders and the predicted ending stocks of corn and soybeans for the 2024 crop. The May WASDE Report updated production forecasts and prices based on planting approaching the midway mark, and the transition to a La Nina event possibly by the third quarter.

At 12H00 EDT on June 6th the CME price for corn was up 0.2 percent compared to the previous week to 450 cents per bushel for July delivery. Corn price was influenced by ethanol demand and the proportionally high ending stock from the 2023 crop. Export orders for the current market year have increased in response to lower prices. Volumes and prices are indirectly influenced by higher wheat prices, events in the Black and Red Seas. Orders by China resumed at the end of the 2022-2023 market-year and have extended through May despite a moderately higher Dollar Index and increased ocean freight but offset by a low FOB prices. Total exports for the current market year are 23.9 percent higher than for the corresponding week during the 2022-2023 year.

Soybeans traded at 1,202 cents per bushel for July 2024 delivery, down 0.3 percent over the week. Slightly higher prices were attributed to trading, less farm selling and projections of availability from the 2024 Brazil and Argentine harvests. Total exports for the current market year are 17.4 percent lower than for the corresponding week in the 2022-2023 year.

Soybean meal traded at \$363 per ton for July delivery, down 0.3 percent. Price was influenced by demand coupled with high crush volumes for consecutive months from December 2023 through March 2024. Price will fluctuate to reflect the CME price for soybeans and the demand for biodiesel despite the adverse financial situation in this sector. The market previously responded to the increased 2023 crop and higher stocks together with projections for 2024 in the extensively revised May WASDE Report .

WTI was \$4.75 (-6.0 percent) lower from last week to \$74.48 on June 5th. Price is down on the balance between supply and demand. The reduction in attacks on shipping in the Red Sea is due to diversion from the Suez Canal. It is evident that U.S. production is a moderating influence on price, attaining 12.9 million barrels per day in March with ample reserves. An upward trajectory in price may occur if production cuts by OPEC amounting to 2 million barrels per day and extended through June actually materialize. There was a slight downward movement in price during the week (range \$78.53 down to \$73.33). Crude oil inventory in the U.S., other than the Strategic Reserve, was down 0.4 percent to 35.4 million barrels last week. High U.S. production is constraining domestic and international prices and the recent decline in energy cost during past three weeks is reflected in deflation possibly influencing the FOMC in their eventual lowering the benchmark interest rate.

Economic data released over the past three weeks (Q1 GDP; PCE, Confidence, Productivity, Employment) confirmed slow growth of the economy but with a slight decline in the trajectory of inflation as noted in the minutes of the FOMC released May 22nd. The data-driven Federal Reserve FOMC passed on lowering the benchmark rate on May 1st and will be disinclined to reduce the 10-year rate until September at the earliest.

Factors influencing commodity prices in either direction over the past four weeks included:

- Weather conditions in areas of the World growing corn and oilseeds especially in Brazil and also Argentine with favorable rain recently under the influence of a strong El Nino event. The 2023 U.S. harvest was completed ahead of the corresponding weeks in 2022 with higher carryover and lower exports of soybeans. (Downward pressure on prices). Harvesting in South America is advanced for the “new” crop of 2024 but has been disrupted by flooding in the southern production states mainly affecting Rio Grande do Sul where up to 25 percent of crops may have been lost.
- Geopolitical considerations continue to move markets, especially in the Mideast. Ongoing attacks on Ukraine port facilities have impacted prices of wheat, corn, oilseeds and vegetable oils. Loaded bulk vessels are sailing from Black Sea and Danube River ports using the ‘Humanitarian Corridor’ to various destinations. This route is operational despite threats by the Russian Federation to mine the entrance to ports and deployment of airborne missiles. Exports from Ukraine are approaching 1.5 million metric tons per week with a total of 26 million metric tons market year through February, down 11 percent from the equivalent period for 2022-2023 year. Grain production in Ukraine during the current year will be lower than 2022/2023 (Downward pressure on corn and wheat and an indirect effect on soybeans)

Macroeconomic U.S. factors:

- Most economists in academia and the private sector are still confident of a “soft landing” for the economy despite the release of the Q1 2024 GDP and recent economic parameters including the ECI, CPI and PPI and with fluctuation in bond rates. Annual inflation as measured by CPI declined from 8.9 percent in June 2022 to 3.5 percent in March 2024. This is in part a response to a series of 11 FOMC rate raises that curbed inflation and cooled the labor market but without precipitating unemployment. There is evident stability in the bank sectors in both the U.S. and Europe. *(continued on next page)*

- The Federal Reserve held the benchmark interest rate steady at the monthly FOMC meeting on May 1st 2024, the sixth sequential pause. The Federal Reserve commentary indicated that the rate would be held at 5.25 percent until a pivot with possibly less than two reductions of 25 basis points each in 2024, after the September meeting at the earliest. Chairman Powell in Congressional testimony and documented in FOMC minutes has indicated that decisions would be based on demonstrated progress in reducing inflation as confirmed by a basket of key economic data, towards an annual 2.0 percent target by mid-2025. Market optimism with projections of five reductions during 2024 was evidently premature.
- The May 30<sup>th</sup> Bureau of Economic Affairs release documented the second estimate of Q1 2024 GDP at 1.3 percent, below the April advanced estimate of 1.6 percent. The Q1 GDP value was influenced by spending by both consumer and government-sectors and with higher investment in housing. By comparison Q4 2023 GDP growth was 3.4 percent. Growth in GDP attained 2.5 percent in 2023 up from 1.9 percent in 2022. The Personal Consumption and Expenditure Index For Q1 (excluding food and energy) was up 2.0 percent. The May 24<sup>th</sup> advanced estimate of Q2 GDP was 3.5 Percent.
- The May 31<sup>st</sup> Bureau of Economic Analysis released the April Personal Consumption and Expenditure Price Index. The core index (excluding food and energy) was up 0.2 percent from the previous month and 2.8 percent year-over-year. This was in line with estimates. The Headline PCE Index was up 0.3 percent over the previous month and 2.7 percent year-over-year. On a monthly basis the price of goods was up 0.2 percent, services were up by 0.3 percent, food down by 0.2 percent and energy up by 1.2 percent. The headline PCE is closely followed by the Federal Reserve and confirms persistent inflation holding above an annual target of 2.0 %.
- The May 15<sup>th</sup> Bureau of Labor Statistics release of the April 2024 CPI confirmed a 0.3 percent increase from March, 0.1 percent below forecast. The annual increase of 3.4 percent was unchanged from March and consistent with the anticipated value. The increase in the core value (excluding food and energy) was up 0.3 percent from March and 3.6 percent for the 12-month period. Food at home was down 0.2 percent from the previous month. The category of 'meat, fish and poultry' was down collectively by 1.0 percent from the previous month. Food away from home was up 0.3 percent from March. On an annual basis all food was up 2.2 percent with food at home up 2.2 percent and food away from home up 4.1 percent. Energy was up 2.1 percent due to gasoline (+1.2) and electricity (+5.1) offset by natural gas (-1.9 percent) in April. The shelter category was up 0.4 percent for the month and 5.5 percent over the past year. The macro trend is inclining towards reduced inflation but restrained by to a rise in energy prices detracting from deflation. The CPI heavily influences FOMC rate decisions.
- The April Producer Price Index for Final Demand (PPI) released on May 14<sup>th</sup> was up by 0.5 percent from March compared to an expectation of 0.3 percent. The PPI was up 2.2 percent over the past 12-months. This is compared to a 6.4 percent increase in 2022. The core PPI value excluding volatile fuel and food, was up 0.5 percent for April compared with 0.4 percent for March and up 3.1 percent for the 12-month period. Food was down 0.7 and energy up 2.0 percent respectively.
- A Federal Reserve release on May 16<sup>th</sup> confirmed that industrial production fell 0.3 percent in April. Capacity utilization was unchanged at 78.4 percent, 1.2 percent below the 1972-2020 average.
- The May 24<sup>th</sup> report by the Census Bureau on Durable Goods Ordered during April 2024 was higher by 0.7 percent to \$284 Billion compared to a revised value of 0.8 percent or \$282 Billion in March. Transportation and specifically aircraft orders were up 1.2 percent. Excluding the Transportation component, new orders increased by 0.4 percent in April compared to March. Shipments of durable goods up 2.4 percent from March that registered a 1.5 percent decline.
- The May 15<sup>th</sup> release of retail and food sales data showed a monthly rise of 0.4 percent in April down from 0.7 percent in February. Retail sales in April 2024 were up 3.0 percent from the corresponding month in 2023. The Federal Reserve FOMC closely monitors retail sales as a measure of the trend in inflation.
- The June 3<sup>rd</sup> release by the Institute for Supply Management (ISM®) recorded a fall in the Manufacturing Index for May at 48.7 down from 49.2 in April and further below the bifurcation point between contraction and expansion of 50.0. New Orders fell to 45.4 (49.1, April) and Production attained 50.2 (51.3 April). The Prices Index fell to 57 in may, down from 60.9 in April denoting lower costs for production. U.S manufacturing continues to contract responding to prolonged high benchmark interest rates.
- On April 30<sup>th</sup> the U.S. Bureau of Labor Statistics reported a 1.2 percent increase in the Employment Cost Index (ECI) over the 1<sup>st</sup> quarter of 2024 against a consensus estimate of 0.9 percent. The year-over-year increase was 4.4 percent compared to an estimate of 4.0 percent and with benefit costs up by 3.7 percent. The March ECI of 1.2 percent compares with a value of 0.9 percent for the 4<sup>th</sup> quarter of 2023. The ECI is closely followed by the Federal Reserve FOMC and further reduces the possibility of a rate cut before September at the earliest.
- The May 24<sup>th</sup> release of the S&P Global Composite U.S. Manufacturing PMI for May rose to 54.4 compared to revised 51.3 in April. This was the highest rise since April 2022.
- The Conference Board Consumer Confidence Index released on May 28<sup>th</sup> for April through May, rose unexpectedly to 102.0 points from a revised 97.5 for the preceding four-week period. The index was higher than a *Reuters* consensus estimate of 95.9. The Present Situation Index was higher to 143.1 in May compared to 142.9 in April. The Expectations Index gained 8.4 percent to 74.6 from a revised 68.8 in April. Values below 80.0 suggest a future recession. Confidence improved over the past four weeks after three successive monthly declines. *(continued on next page)*

- Non-farm payrolls added 272,000 in May, as documented by the Bureau of Labor Statistics in a June 7th release. This was unexpectedly more than the anticipated 190,000 projection, and should be compared to the revised April value of 165,000. The substantial increase was attributed to workers hired in the education, health care and government sectors. The unemployment rate rose to 4.0 percent from 3.9 percent with 6.5 million unemployed. Real average hourly earnings during May showed a 0.4 percent increase over April to \$34.95. Labor participation was almost unchanged at 62.5 percent in May. Wage rates have increased 4.1 percent over 12-months, the lowest gain since June 2021. Wage rates are closely followed by the Federal Reserve FOMC.
- The Bureau of Labor Statistics Job Openings and Labor Survey report released on June 4th estimated 8.06 million job openings at the end of April, compared with the revised March value of 8.35. The April job openings number was the lowest value since February 2021 and compares with the March 2022 value of 12.2 million job openings during COVID. The hiring rate was 3.6 percent (5.6 million hires) with an April quit rate of 2.2 percent both values unchanged from March.
- The seasonally adjusted initial jobless claims figure of 229,000 released on June 6th for the week ending June 1st increased by 10,000 from the previous week and represented a four-week high. The Weekly value was higher than the Reuter's estimate of 219,000. The four-week moving average was 222,250. The Bureau of Labor Statistics estimated 1.790 million continuing claims for the week ending May 18th. There is evidence from data over the past three months that the labor market is cooling, although still tight, despite sporadic weekly fluctuation in new claims.
- The June 6th Bureau of Labor Statistics report recorded a revised 0.2 percent increase in non-Farm Productivity for Q1 2024 down from 0.7 percent in Q4 2023. Labor cost increased 4.0 percent annualized, down from an initial estimate of 4.7 percent.
- The ADP® reported on June 4th that private payrolls increased by 152,000 in May, down 36,000 from the revised 188,000 in April and compared to the Dow Jones estimate of 175,000 jobs. The increase in employment was mostly in the health, services and hospitality sectors with 149,000 positions while manufacturing lost 20,000 slots. Annual pay was up 5.0 percent year-over-year, for the third successive month and the lowest value since August 2021. The increase will not directly influence the probability of short-term future changes in interest rate since the ADP® is regarded as less reliable by the FOMC than the Bureau of Labor Statistics Monthly non-farm payroll report.

#### FACTORS INFLUENCING COMMODITY PRICES

- The May 10th WASDE projected acreage to be planted, yields, crop size and ending stocks for the 2024 crop.
- It is evident that both polarization in the closely divided chambers of Congress and intra-party conflict between and within both sides of the aisle in the House delayed adoption of appropriations bills. Passage of the 2023 Farm Bill will be contentious and is subject to a 12-month extension as a stop-gap measure. Progress on the 2023 Farm Bill has been impeded by contention over SNAP eligibility and other entitlements that collectively represent 75 percent of total expenditure. The August 2nd downgrade of U.S. debt from AAA to AA+ by Fitch Ratings recognizes Congressional dysfunction. On November 10th 2023 Moody's downgraded U.S. credibility from 'stable' to 'negative' based on an inability to pass required fiscal legislation. After four Continuing Resolutions the House and Senate passed six appropriations bills including the FDA and USDA, avoiding a March 8th partial shutdown of the Federal Government. Agreement was concluded on the remaining appropriations bills on March 23rd maintaining Federal funding through October 2024. Currently the position of the Speaker of the House is more secure suggesting progress in passing needed legislation in the succeeding weeks of the 118th Congress.
- The delayed 2023 Farm Bill is mired in conflict in both the House and Senate. Despite the markup of the House version. There is no consensus on major issues comprising the magnitude of SNAP payments and eligibility, allocation of funds for climate remediation and requested price supports for crops. The Chair of the Senate Agriculture Committee Sen. Debbie Stabenow (D-MI) is standing firm on maintaining both SNAP-WIC benefits and climate remediation even if the Farm Bill is delayed through to the 119th Congress. There is no confirmation that funding will be available for crop support payments as included in the House version.
- The May 10th WASDE #648 Projected both corn and soybean production parameters with a potential record soybean harvest for the 2024 crop. There will be ample world availability of ingredients although inequitable distribution will result in shortages in some nations. Soybean exports will comprise 38.0 percent of the 2024 U.S. crop with a 30.7 percent increase in ending stock to 445 million bushels as compared to the April WASDE Report. The projection of corn exports suggests that exports will amount to 13 percent of the 2024 crop with ending stocks down 0.9 percent to 2,102 million bushels.
- Rabobank projected the soybean crop in Brazil at 153 million metric tons on April 4th albeit before flooding. This value is higher than the projection by CONAB (the Soy production association in Brazil) at the midpoint of the soybean harvest, of 147 million metric tons (5,401 million bushels) down from a previous estimate of 155 million metric tons (5,695 million bushels). Exports of 100 million metric tons (3,674 million bushels). It is anticipated that Brazil will crush 56 million metric tons (2,057 million bushels). If CONAB is correct the harvest will be 7 million metric tons (269 million bushels) lower than the 2023 record crop. Brazil exported 7.0 million metric tons (257 million bushels) of soybeans to China over the first two months of 2024, double the quantity shipped to this nation over the corresponding two months in 2023.
- Corn production in Brazil for the 2023-2024 market year will attain 124 million metric tons (4,801 million bushels) from all three sequential harvests. But down seven percent from the previous year. Brazil is projected to export of 54 million metric tons (2,125 million bushels). *(continued on next page)*

- Argentina will produce 50 million metric tons of corn (1,968 million bushels), double compared to the previous year impacted by drought. (Lower prices in the future subject to favorable reports on crop progress and actual harvests)
- The Dollar Index (DXY) was 104.1 at close on June 5th, down 1.0 point from last week based on recent U.S. economic data suggesting a delay in lowering benchmark interest rates until the fall and prevailing high bond rates. The DXY has ranged from 99.0 to 107.0 over the past 52 weeks. The dollar index influences timing and volume of export orders and indirectly the price of WTI crude.

## EXPORTS

The FAS Export Report for corn, released on June 6th for the week ending May 30th confirmed that outstanding export orders for corn amounted to 11.89 million metric tons (468.01 million bushels). Net orders for the past week for the 2023-2024 market year amounted to 1.18 million metric tons (46.48 million bushels) consistent with lower price. Shipments recorded during the past working week amounted to 1.49 million metric tons (58.61 million bushels). For the current market year to date cumulative export of 39.38 million metric tons (1,550 million bushels) is 23.9 percent higher compared to the equivalent week of the previous market year. For market year 2024-2025 outstanding orders attained 2.91 million metric tons (114.58 million bushels) with 113,300 metric tons (4.46 million bushels) ordered this past week. (Conversion 39.36 bushels per metric ton. Quantities in metric tons rounded to 0.1 million)

The FAS Export Report for soybeans covering the week ending May 30th reflecting market year 2023-2024, recorded outstanding export orders amounting to 3.42 million metric tons (125.76 million bushels). Net orders this past week attained 0.19 million metric tons (6.07 million bushels). Shipments for the past working week attained 0.39 million metric tons (14.26 million bushels). For the current market year to date cumulative exports of 39.98 million metric tons (1,469 million bushels) are 17.4 percent lower compared to the equivalent week of the previous market year. Outstanding orders for the 2024-2025 market year amount to 1.04 million metric tons (38.10 million bushels) with 73,800 tons (0.27 million bushels) ordered this past week. (Conversion 36.74 bushels per metric ton)

For the week ending May 30th 2023 outstanding orders for soybean meal and cake attained 2.87 million metric tons. Net orders this week for soybean meal and cake amounted to 250,200 metric tons. During the past week 231,100 metric tons of meal and cake combined was shipped. The quantity of 9.46 million metric tons exported to date is 12.5 percent higher than the volume for the corresponding weeks of the previous market year. For the next market year outstanding sales have attained 473,800 metric tons with 4,100 tons ordered this past week.

The May 10<sup>th</sup> 2024 WASDE #648 projected:

- Corn area planted for all purposes in 2024 ('new crop') will attain 90.0 million acres, down 4.9 from last year. According to the May WASDE, yield was projected at 181.0 bushels per acre with a resulting production of 14,860 million bushels with 2,102 million bushels as ending stock. The USDA reduced the average ex-farm price to 440 cents per bushel for the 2024 crop.
- Soybean area to be planted for 2024 will attain 86.5 million acres, up 3.5 percent from 2023. According to the May WASDE, yield was predicted at 52.0 bushels per acre with production of 4,450 million bushels with 445 million bushels as ending stock. The USDA reduced the average season price to 1,120 cents per bushel.
- Crushers are expected to produce 57.08 million tons of soybean meal. Ending stocks will attain 400,000 tons. The USDA projected a lower season price at \$330 per ton.

The preference for planting soybeans in 2024 was based on a favorable projection of the soy to corn benefit ratio despite lower prospects for exports but with higher domestic demand for crushing.

## COMMODITY PRICES

The following quotations for the months of delivery as indicated were posted by the CME at 12H00 EDT June 6th 2024, compared with values at 12H00 on May 30th 2024 (in parentheses):

### COMMODITY

Corn (cents per bushel)	July	450	(449)	Sept.	456	(457)
Soybeans (cents per bushel)	July	1,202	(1,209)	Sept.	1,171	(1,189)
Soybean meal (\$ per ton)	July	363	(364)	Sept.	355	(358)

*Changes in the price of corn, soybeans and soybean meal over five trading days this past week were:*

Corn:	July quotation up 1 cent per bushel.	(+0.2 percent)
Soybeans:	July quotation down 7 cents per bushel	(-0.6 percent)
Soybean Meal:	July quotation down \$1 per ton	(-0.3 percent)

*The CME spot prices for feedstuffs per short ton at close of trading on June 5<sup>th</sup> 2024 with prices for the previous week were:*

- Corn (ZC): \$158 per ton, was \$163 per ton, down \$5 per ton (-3.1 percent) from the previous week. 52-week range \$149 to \$233
- Soybean Meal (ZM): \$361 per ton, was \$371, down \$10 per ton (-2.7 percent) from the previous week. 52-week range \$323 to \$495

[Click here for full article](#)



# 2024 ART CONTEST



Eligible to enter if related to a TPA complex employee,  
allied company employee, or grower member



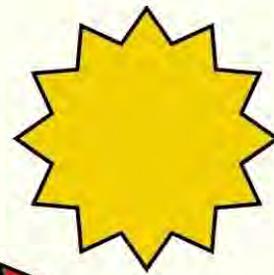
DEADLINE  
**FRI, AUG. 9TH**  
**3:00 PM CT**

WINNERS RECEIVE A **CASH** PRIZE!

## CATEGORIES

9 and Under  Ages 10-14  Ages 15-18

EMAIL JOCELYNN MAGAN AT [JOCELYNN@TNPOULTRY.ORG](mailto:JOCELYNN@TNPOULTRY.ORG) FOR RULES AND ENTRY FORM



# 2024 YOUTH ART CONTEST

## Rules

TPA welcomes participation in our 8th annual art contest for youth. All entries will be displayed and judged during the TPA Annual Meeting & Summer Getaway on August 9th-10th, 2024, at the Gaylord Opryland Resort & Convention Center in Nashville.

### Subject

All art must be chicken celebration related i.e., of chicken(s), poultry live operation, chicken birthday party - help us celebrate 70 years with your art!

### Eligibility

Family members (children, grandchildren, nieces/nephews, stepchildren, etc.) of TPA grower members, TPA poultry complex employees, or affiliated TPA allied company members are eligible to submit entries. There will be three age categories: 9 and under, Ages 10-14, and Ages 15-18 (age as of August 1st, 2024).

Our Eggceptional Friends of Poultry category is reserved for children up to age 18 who have a diagnosed exceptionality. Those qualified to enter in this category may submit a drawing, painting, or other project that fits their individual gifting. Some suggestions could include, but are not limited to, poultry-related photography, posters with pictures or cutouts, Lego or Popsicle stick buildings, etc.

### Awards

Each group will have 1st, 2nd, and 3rd place winners that will be awarded ribbons; they will also be eligible to receive cash prizes of \$50, \$25, and \$10 respectively for each age division. There will be an overall Best of Show entry awarded which will be auctioned off during the TPA live auction fundraiser on August 10th in lieu of the cash prize. All proceeds from the sale of the winning art piece will be awarded to the artist as a scholarship.

### Media

- Art MUST be submitted on 8 ½ x 11 (or similar size) rigid canvas, sketch, or cardstock paper. No exceptions.
- *Framed entries will not be accepted*, but all entries must be suitable for framing.
- Drawings and paintings are the only types of media that can be entered unless entering the Eggceptional Friends of Poultry category
- Drawings using pencil, charcoal, colored pencil, ink, markers, etc. are acceptable
- Paintings using acrylic, oils, tempera, watercolors, etc. are acceptable

### Entry

All entries must be received at the TPA Annual Meeting at the Gaylord Nashville no later than 3:00 PM CT on Friday, August 9th, 2024. Mail-in entries are discouraged, so if you are not attending the meeting, please send your artwork with someone who is.

### Include

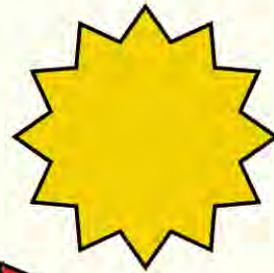
Please complete and submit the attached TPA Art Contest Entry Form. Artwork will not be returned unless the attached form and requested information is submitted. Please include your name and age on the back of your art piece.

### Judging

All entries will be judged by a panel of industry representatives during the TPA Annual Meeting on Friday, August 9th.

### More Information

- The art will stay on display through the evening TPA banquet on August 10th
- Photo rights to all artworks become property of TPA for use on social media and for promotional efforts
- TPA is not responsible for lost or damaged entries
- TPA will auction off the Best of Show art piece and will not be returned to the artist. Please allow two weeks for remaining entries, ribbons, and prize money to be mailed
- TPA is not responsible for the receiving or condition of mailed in entries
- Contact [jocelynn@tnpoultry.org](mailto:jocelynn@tnpoultry.org) for more information



# 2024 YOUTH ART CONTEST

Entry Form

NAME (FIRST & LAST): \_\_\_\_\_

AGE (AS OF AUGUST 1ST, 2024): \_\_\_\_\_

CONTACT PHONE NUMBER: \_\_\_\_\_

HOMETOWN & STATE: \_\_\_\_\_

FAMILY MEMBER'S NAME: \_\_\_\_\_

RELATIONSHIP: \_\_\_\_\_

EMPLOYER OR GROWS FOR: \_\_\_\_\_

TPA will contact and award the 1st through 3rd place in all categories and the Best of Show winner. The Best of Show winner will receive a scholarship check for the sale of their art piece. Contestants who would like to have their artwork returned and have ribbons and checks sent to them after the entries are judged should provide a complete physical mailing address:

\_\_\_\_\_

## ADDRESS

\_\_\_\_\_

CITY

STATE

ZIP

TPA is not responsible for the condition of artwork or for any losses or damages.

Please include this entry form along with your entry to be received by TPA no later than Friday, Aug. 9th, 2024, at 3:00 PM CT at the Gaylord Opryland Resort & Conference Center, Nashville.

*For more information, contact [jocelynn@tnpoultry.org](mailto:jocelynn@tnpoultry.org)*



**Spring Hill, TN** - Poultry production and processing is a \$10 billion industry in Tennessee, with more investment expected. To support the future of the industry, the University of Tennessee Institute of Agriculture is investing in the construction of a state-of-the-art, next generation poultry research and education facility at its Middle Tennessee AgResearch and Education Center in Spring Hill.

On Thursday, May 2, nearly 100 state and local officials and members of the poultry production and processing industry joined university officials to celebrate the official groundbreaking for the new project. Four commercial-size (54' x 600') broiler production houses as well as supporting facilities, including a research and teaching lab and office spaces, are to be constructed on the site. The facility will be the premier commercial broiler research unit in the country and will support the university's land-grant mission of teaching, research and practical application.

UT System President Randy Boyd thanked the honored guests and partners for their successful support of the facility and the benefits it will bring in terms of animal welfare, production efficiency and workforce development. Among the guests at the event were Tennessee Commissioner of Agriculture Charlie Hatcher, Spring Hill Mayor Jim Hagaman, Maury County Mayor Sheila Butt, Tennessee Farm Bureau President Eric Mayberry, and a delegation of officials from Tyson Foods, including Vice President for Live Operations Shane Joyner.

All agree that building the facility makes sense for Tennessee. The state ranks 15th in broiler production in the nation and statewide has a processing capacity of more than 8 million birds per week. What's more, approximately 45% of the world's broiler meat traces back to Tennessee's primary breeder operations and genetics. The new facility is expected to contribute to future growth of the industry across the state and nation.

In a short presentation before the groundbreaking, Joyner shared the main focus of the facility is researching production animal health and well being, in addition to industry and environmental sustainability. He also emphasized the advantages to processors and consumers alike. "With UT's expertise in research and our expertise in the industry, we are going to do a lot of good things for a lot of people. This facility will become a talent hub for the industry in the area, and we've needed that for a long time," he said.

Keith Carver, UT Institute of Agriculture Senior Vice President and Senior Vice Chancellor, and Hongwei Xin, dean of UT AgResearch, also noted that it's the role of UTIA to educate current and future members of the workforce along with enhancing producer success.

"From precision livestock farming techniques, to sprinkler cooling and water conservation efforts, to the latest in lighting research and the most advanced animal welfare research, the facility will provide students and researchers, growers, and allied industry personnel opportunities that have never before been possible," said Xin. He also stressed the importance of increasing production capacity to support the world's growing human population.

Construction is expected to be completed in the latter part of 2025, and at maximum capacity, the facility will house approximately 160,000 broiler chickens.

The University of Tennessee Institute of Agriculture is comprised of the Herbert College of Agriculture, UT College of Veterinary Medicine, UT AgResearch and UT Extension. Through its land-grant mission of teaching, research and outreach, the Institute touches lives and provides Real. Life. Solutions. to Tennesseans and beyond. [utia.tennessee.edu](http://utia.tennessee.edu).



# TPA ANNUAL MEETING & SUMMER GETAWAY

August 9 & 10, 2024 - Gaylord Opryland Resort, Nashville, TN

JOIN US IN CELEBRATING 70 YEARS OF TPA ANNUAL MEETINGS!!!

Name \_\_\_\_\_ Company \_\_\_\_\_

Address, City, State, Zip \_\_\_\_\_

Cell phone \_\_\_\_\_ Email Address \_\_\_\_\_

Additional Guest Names \_\_\_\_\_

## FRIDAY, AUGUST 9 (no charge)

\_\_\_\_ # attending annual meeting & speaker program @ 1:00 pm

\_\_\_\_ # attending the reception & silent auction @ 5:00 pm

### SILENT AUCTION

\_\_\_\_ I will contribute the following auction items or cash amount:  
\_\_\_\_\_

\_\_\_\_ I will bring the items with me \_\_\_\_ I will ship the items to TPA

## SPONSORSHIP, AUCTION, MEMBERSHIP\*\*\*

- Super Sponsor** \$10,000.00  
*Includes 4 dinner tickets, 4 tickets to any Saturday morning activity, golf or shooting co-sponsor, 2 additional activity sponsorships, live auction item sponsorship (approx. \$1,000 value), top billing with company logo on printed materials*
- Diamond Sponsor** \$ 5,000.00  
*Includes 4 dinner tickets, 2 activity sponsorships, company logo on printed materials*
- Platinum Sponsor** \$ 2,500.00  
*Includes 2 dinner tickets, 1 activity sponsorship, company logo on printed materials*
- Gold Sponsor** \$ 1,000.00
- Bronze Sponsor** \$ 500.00
- Auction Cash Donation** \$ \_\_\_\_\_

TOTAL COMMITMENT

\*\*\*Deadline for sponsorship recognition on printed materials is July 17.

## REGISTRATION DEADLINE: July 8, 2024

**LATE FEE - \$50**

- ◆ Registration opens May 24 at [www.tnpoultry.org](http://www.tnpoultry.org) or
  - ◆ SEND REGISTRATION FORMS TO [jocelynn@tnpoultry.org](mailto:jocelynn@tnpoultry.org)
  - ◆ Hotel reservations may be made online at <https://book.passkey.com/go/TNPoultry2024>
- ◆ All reservations at the Gaylord require a one night deposit.
- ◆ TPA does not manage hotel rooms or make reservations for attendees. If you require a hotel room, please contact the hotel to book your stay.

TPA room rate available until 4 pm CT on July 10, 2024

## SATURDAY, AUGUST 10

### GOLF TOURNAMENT

7:00 am sign-in @ Gaylord Springs Golf Links, Nashville  
*(Please complete a separate registration form for each golfer)*

Golfer Entry @ \$ 200.00 \$ \_\_\_\_\_  
*(Includes driving range, greens fee, cart, lunch, t-shirt)*

Red Tee & Mulligan @ \$ 20.00 \$ \_\_\_\_\_

Handicap or average score (required) \_\_\_\_\_

T-shirt size \_\_\_\_\_

Sponsor a Golf Hole x \_\_\_\_\_ @ \$ 200.00 \$ \_\_\_\_\_

Donation for door prizes (\$ 25.00 min) \$ \_\_\_\_\_

### SPORTING CLAYS SHOOT

9:00 am sign-in @ Cross Creek Clays  
3975 Jarman Hollow Rd, Palmyra, TN 37214 (61 miles)  
*(Please complete a separate form for each shooter)*

Shooter Entry @ \$ 150.00 \$ \_\_\_\_\_  
*(Includes shells, fees, snacks, lunch, t-shirt)*

Shotgun Gauge (shells provided for 12 or 20 gauge only) \_\_\_\_\_

Check here if you need to rent a shotgun \_\_\_\_\_

T-shirt size \_\_\_\_\_

Sponsor a Station x \_\_\_\_\_ @ \$ 200.00 \$ \_\_\_\_\_

Donation for door prizes (\$ 25.00 min) \$ \_\_\_\_\_

### OTHER SATURDAY OPTIONS

General Jackson x \_\_\_\_\_ @ \$ 100.00 \$ \_\_\_\_\_  
*(Lunch is included; space is limited)*

Gaylord Relache Spa \*\* x \_\_\_\_\_ @ \$ 175.00 \$ \_\_\_\_\_

\*\*Participants must book own appointments at 615-458-1772\*\*

ADVANCE PAYMENT TO TPA IS REQUIRED (Space is limited)

### SATURDAY EVENING DINNER & ENTERTAINMENT

Reception @ 5:00 p.m. followed by Dinner @ 5:30 p.m.  
*Reservations required*

Dinner Tickets x \_\_\_\_\_ @ \$ 250.00 \$ \_\_\_\_\_  
*(Required for all attendees)*

### CONFERENCE REGISTRATION FEE

Individual @ \$ 45.00 \$ \_\_\_\_\_

Couple @ \$ 70.00 \$ \_\_\_\_\_

Late Fee (after July 8) @ \$ 50.00 \$ \_\_\_\_\_

GRAND TOTAL  
from both columns

\$

**ABSOLUTELY NO REFUNDS WILL BE ISSUED!!!**

Advance payment is required for all Saturday activities.



**AGgrow Tech**  
Travis Hedrick  
(336) 763-7212

**Ag Lighting Innovations**  
Stanton Lee  
(615) 378-0108

**AgriWaste Technology**  
Emory Skinner  
(919) 729-5696

**Amlan International**  
Chris Dyer  
(770) 335-5552

**Animal Health International**  
Jeff Sims  
(256) 504-2588

**Arm & Hammer Animal Nutrition**  
Barry Fuller  
(256) 565-6642

**BankPlus**  
Kenny Williamson  
(601) 850-7306

**Best Veterinary Solutions, Inc.**  
Van Harper  
(812) 259-9146

**Big Dutchman**  
Jeff Ratledge  
(616) 283-4527

**BinSentry**  
Chad Wiggs  
(256) 558-4270

**BioSafe Systems**  
Chynette Todd  
(931) 704-2336

**Blueline Pressure Washing**  
Clay Doggett  
(931) 638-9114

**Boehringer Ingelheim**  
Dr. Kristen Roza-Sutherland  
(703) 453-8606

**Buffalo Warren**  
Lee Hester  
(704) 366-5763

**Cantrell Gainco**  
Scott Seabrook  
(404) 414-2149

**Cargill Animal Nutrition**  
Kevin Riley  
(404) 434-1199

**Ceva**  
Todd Grisham  
(256) 503-5726

**CGB AgriFinancial**  
Barry Rager  
(270) 604-1611

**ChemStation Mid-South**  
Roy Brown  
(901) 345-5333

**Chore-Time Poultry**  
Stephen Batson (501) 499-0247  
Logan Waldrop (706) 716-0733

**Circle A Manufacturing**  
Scott Shew  
(336) 262-7164

**ClearH2O**  
Jimi Dee Clark  
(207) 650-0230

**Clear Comfort**  
Jennifer Labuda  
(704) 903-2129

**Clear View Enterprises**  
Johnny Smith  
(770) 712-0015

**Cole Agency**  
Rusty Russell  
(478) 472-2010

**Cor Solar and Electric**  
Peter Richardson  
(417) 771-5616

**Cumberland Poultry**  
Brian Johnson (217) 820-3530  
Randy Stidham (217) 561-6527

**D & F Equipment Sales**  
Heath Morrow  
(256) 302-0120

**Danisco Animal Nutrition**  
Bob Moore  
(908) 433-7989

**Darling Ingredients**  
Tim O'Connor  
(270) 893-0252

**Diamond V**  
Jason McCamy  
(256) 506-7194

**Diversified Ag**  
Brad Bowen (479) 879-2832  
Chris Nelson (270) 499-0315

**Elanco Animal Health**  
Will Gretsch  
(706) 521-9243

**Evonik**  
Mark Daniel  
(423) 313-7898

**Fairmount Poultry**  
Mark Owens  
(706) 337-5941

**Farm Credit Mid-America**  
Devin Gilliam  
(615) 708-8590

**Farmers Poultry Supply**  
Andy Ratliff  
(256) 734-5485

**First Financial Bank**  
Greg Graham  
(256) 845-4270





<p><b>Georgia Poultry Equipment</b> Mike Sears (479) 435-4255</p>	<p><b>Nom Nom</b> Tonya Bryant (540) 761-4725</p>
<p><b>Global Animal Products</b> Randy Maclin (706) 338-8778</p>	<p><b>Once by Signify</b> Jason King (615) 5809137</p>
<p><b>Green Wave Solar</b> Landon Cason (615) 237-1737</p>	<p><b>Overdrive Lighting</b> Erin Fariss (800) 657-0509</p>
<p><b>Huvepharma</b> John Elmore (256) 476-6488 Joe Williams (205) 412-0192</p>	<p><b>Poultry Guard</b> Clint Lauderdale (256) 636-3303</p>
<p><b>Innovative Poultry Products</b> Chad Brubaker (803) 571-3345</p>	<p><b>Poultry South</b> Robert King (256) 252-9239</p>
<p><b>International Paper</b> Russ Bratton (731) 501-9164</p>	<p><b>Precision Lighting Systems</b> Danny Cross (501) 624-5566</p>
<p><b>JBT Corporation</b> Jody Howell (770) 530-1895</p>	<p><b>Proxy-Clean Products</b> Mary K. Foy (479) 387-6972</p>
<p><b>Johnson Energy Solutions</b> Dale Barnett (931) 434-8045</p>	<p><b>QC Supply</b> Jonathan Atkins (271) 537-3352</p>
<p><b>Johnson Farm &amp; Agribusiness Insurance</b> Wes Johnson (336) 655-9710</p>	<p><b>Quality Incentive Company</b> Peter Krstovic (404) 431-0792</p>
<p><b>Jones-Hamilton Co.</b> Rory DeWeese (423) 902-5161</p>	<p><b>Rabo AgriFinance</b> <a href="http://www.raboag.com">www.raboag.com</a></p>
<p><b>Kemin Animal Nutrition and Health</b> Wes Sullivan (870) 403-6991</p>	<p><b>Reliable Poultry</b> Kendall Proctor (479) 601-2676 Dennis DeBerry (731) 414-7718</p>
<p><b>Lew Thompson &amp; Son Trucking</b> Emily Tomas (423) 504-6372</p>	<p><b>Renewable Thermal Solutions</b> Bob Reeves (936) 591-1900</p>
<p><b>Lhoist NA</b> Barry Collins (931) 368-9057</p>	<p><b>Rural Energy Development</b> Lee Shepard (770) 701-4108</p>
<p><b>Live Oak Bank</b> Michael Imming (910) 499-4687</p>	<p><b>River Valley AgCredit</b> Todd Miles (423) 260-7606 Hunter Ballew (423) 453-6433</p>
<p><b>Lubing</b> Chris Hawk (423) 595-4160</p>	<p><b>Scenic City Solar</b> Ray Kazlaskia (423) 619-1029</p>
<p><b>Marel, Inc.</b> Brad Powell (256) 738-5384</p>	<p><b>Smith Creek, Inc.</b> Jeff Roll (812) 431-1579</p>
<p><b>Maximus Solutions</b> Tyler Lesch (770) 701-4108</p>	<p><b>SolarLegacyPros.com</b> David Goodale (865) 249-0000</p>
<p><b>Merck Animal Health</b> Paul Burke (615) 804-3564</p>	<p><b>Southland Organics</b> Allen Reynolds (800) 608-3755 ext 701</p>
<p><b>MP Equipment</b> Andrew Todd (256) 698-1310</p>	<p><b>Southwestern Sales Co.</b> David Cook (479) 427-8005</p>





**Space-Ray**  
Jeff Wilson  
(254) 252-0434

**Sunbelt Rentals, Inc.**  
Bart Smith  
(205) 602-2485

**SunCoast Pine Shavings**  
Sean Brown  
(850) 363-8899

**Superior Plus Propane**  
James Watson  
(404) 307-3491

**Swallows Insurance Agency**  
Gabe Colwell or Greg McDonald  
(931) 526-4025

**TN Corn Promotion Council**  
Carol Reed  
(731) 819-7111

**TN Department of Agriculture**  
Andy Holt  
(731) 514-6071

**Tennessee Farmers Co-op**  
Jimmy Ogilvie  
(615) 714-3212

**Thompson Gas**  
Dave Bobich  
(423) 331-6717

**Trantham Services, Inc.**  
Troy Trantham  
(256) 820-1988

**TriGreen Equipment**  
<https://www.trigreenequipment.com/marketing@trigreenequipment.com>

**UT - Extension**  
Tom Tabler  
(412) 486-2129

**VAL-CO**  
Trey Martin  
(812) 968-4379

**Vaxxinova**  
Greg Hanson  
(334) 494-6373

**Viand Group**  
Maggie Smith  
(931) 607-4176

**Vincit Group**  
Eric Killen  
(423) 504-1974

**Weeden Sprinkler Systems**  
Kevin Weeden  
(519) 535-4943

**Zoetis**  
Daniel Pugh  
(731) 886-4804



**TN Poultry Association**  
P.O. Box 1525  
Shelbyville, TN 37162  
[www.tnpoultry.org](http://www.tnpoultry.org)

**Tracy Rafferty**  
Executive Director  
(270) 363-2078  
(931) 703-3923  
[Tracy@tnpoultry.org](mailto:Tracy@tnpoultry.org)

**Jocelynn Magan**  
Marketing Specialist  
(270) 363-2078  
[Jocelynn@tnpoultry.org](mailto:Jocelynn@tnpoultry.org)

Follow us on Facebook & Instagram

**Not currently a member of TPA?**

Contact Tracy at (270) 363-2078 or [tracy@tnpoultry.org](mailto:tracy@tnpoultry.org) for more information about member benefits.