

TPA NEWSLETTER

“Serving the integrated broiler/breeder industry in Tennessee”



Spring 2021

AVIAN INFLUENZA SITUATION REPORT

While various strains of avian influenza are running rampant on the other side of the world, the U.S. thankfully does not have any reported cases to date. As most everyone knows, birds migrating south along the Mississippi flyway (which includes all of TN) lay over for the winter in various regions of the Gulf, Central America and South America. The good news for now is that there have not been any wild bird strains reported in any of these areas as birds start thinking about migrating north this spring. March 3rd does, however, mark the beginning date of the H7N9 outbreak in Lincoln and Giles Counties that occurred in 2017 in TN that was thankfully contained quickly and eradicated by our State Veterinarian, USDA and the two complexes affected.

One could easily argue that the greatest threat for HPAI may exist this fall - after wild birds migrating north have had the chance to come together this summer with birds arriving from the Eastern hemisphere, before all heading south again along their separate flyways. This, however, does not mean that we will be completely in the clear during the coming months, for we do not know what may be truly incubating or about to surface on our own hemisphere as birds start migrating north. Relentless biosecurity measures must continue to be optimally implemented at all times. The phrase “all in or all gone” is hopefully well engrained into us all. *(continued on page 2)*



COVID FUNDING OPPORTUNITIES FOR GROWERS

Information follows regarding two possible COVID-relief funding opportunities for contract growers.

1. Have you contacted your local FSA office and applied for CFAP2 funding as a contract grower for broilers, pullets or breeders? This program is currently on hold but is expected to open back up so please make sure you get signed up right away. The initial application deadline was Feb. 26th but has now been extended for at least another 30 days. *Up to 80%* of lost income for 2020 *may* be paid out if approved. Copies of your 1099s for 2019 and 2020 and your grower contract may be needed. <https://www.farmers.gov/cfap>. Please let the TPA office know immediately if your local FSA office is not able to get you signed up or tells you something different from the above.
2. Have you applied for a PPP loan through your ag lender or local bank? These funds *may* qualify as forgivable loans to pay labor (that may include yourself) and utility bills. **The application deadline is March 31, 2021.** Apply today if you haven't already, for the funding could run out. A few of our TPA grower members have reported qualifying for as much as \$20,833 as forgivable loans. <https://www.fb.org/market-intel/application-period-opens-for-improved-round-of-paycheck-protection-program>. If you receive grower pay that is reported as “rental income” on your Schedule F you may not qualify but please go ahead and inquire about the program. If declined for forgivable funds, ask about getting set up with a loan at a 1% interest rate through this program.
3. *Unless or until officially informed otherwise, assume that any and all funding is taxable. The TN Poultry Association is not responsible for any information or details concerning these federal programs.*

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Avian Influenza Situation Report *(continued from front page)*

According to the OIE ([World Organization for Animal Health](#)) there were over 9 million birds lost or destroyed as a result of the ongoing avian influenza outbreaks in Europe, Asia and Africa between Jan. 15 and Feb. 4 in 2021. There were over 7.38 million losses during the previous reporting period. Russia has reported the infection of seven workers at a poultry processing plant in the southern part of the country, and its first human fatality due to H5N8 and the WHO ([World Health Organization](#)) continues monitoring human cases in China and other areas of the Western Pacific Region due to H5N1, H5N6 and other strains.

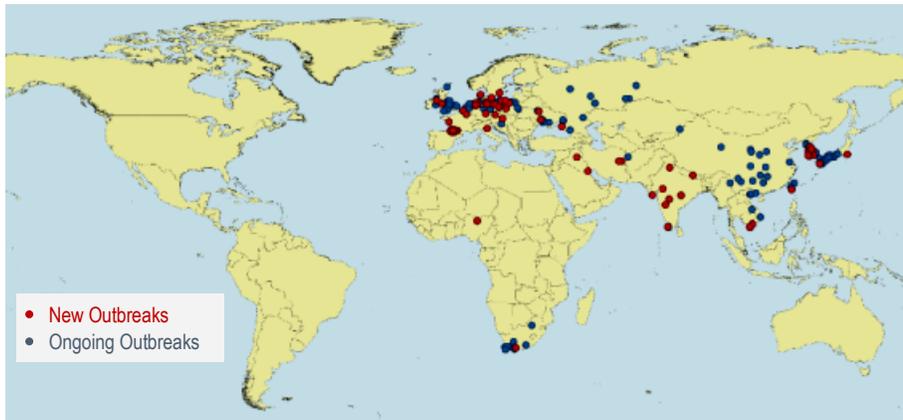


Figure 1. New and ongoing outbreaks in poultry (15 January – 04 February, 2021)

In this period, 410 new outbreaks (red dots on the map) were notified in poultry, in 23 countries in Africa, Asia and Europe. The total ongoing HPAI outbreaks worldwide is 739 (blue dots on the map). They are distributed as follows: Africa (17), Asia (184), Europe (538). [Source: OIE](#)

Key messages from the latest OIE report include:

In the reporting period 410 new HPAI outbreaks in domestic birds (subtypes H5, H5N1, H5N5, and H5N8) and 233 new outbreaks in non-poultry (subtypes H5, H5N1, H5N3, H5N4, H5N5 and H5N8) were reported in Asia, Europe and Africa. In addition, 1086 HPAI outbreaks in poultry and non-poultry are still ongoing in Europe, Asia and Africa, involving different subtypes, namely H5, H5N1, H5N2, H5N3, H5N5, H5N6, H5N8 and H7N9. The number of new and ongoing outbreaks reported by countries notably in Asia and Europe continue to be significant during this period.

To summarize, the current HPAI H5 epidemic is still progressing in Europe, Asia and Africa causing severe impact due to dead and culled birds in the infected premises. It is more likely that the source of introduction in these outbreaks is through migratory wild birds and onward local spread. A similar situation of H5N8 epizootics associated with wild bird migration occurred in 2016/17. Report of increased number of outbreaks in wild birds indicate periods of heightened risk in countries due to migratory flyways during this season. Consequently, improving on-farm biosecurity measures is a priority to reduce the likelihood of exposure to poultry.

To view the latest situation report [view here](#). □

Is the US Poultry Industry Ready for Another HPAI Outbreak?

February 25, 2021 in [WattAgNet.com](#) by Deven King

The 2015 outbreak of highly pathogenic avian influenza (HPAI) negatively impacted the U.S. poultry industry and may be a threat again. "We have learned a lot these last six years since we have had HPAI in Minnesota," said Dr. Dale Lauer, a veterinarian with the Minnesota Board of Animal Health during the "Defend the Flock: How Avian Influenza Affects Us All" webinar was hosted by the USDA Animal and Plant Health Inspection Service on Feb. 25.

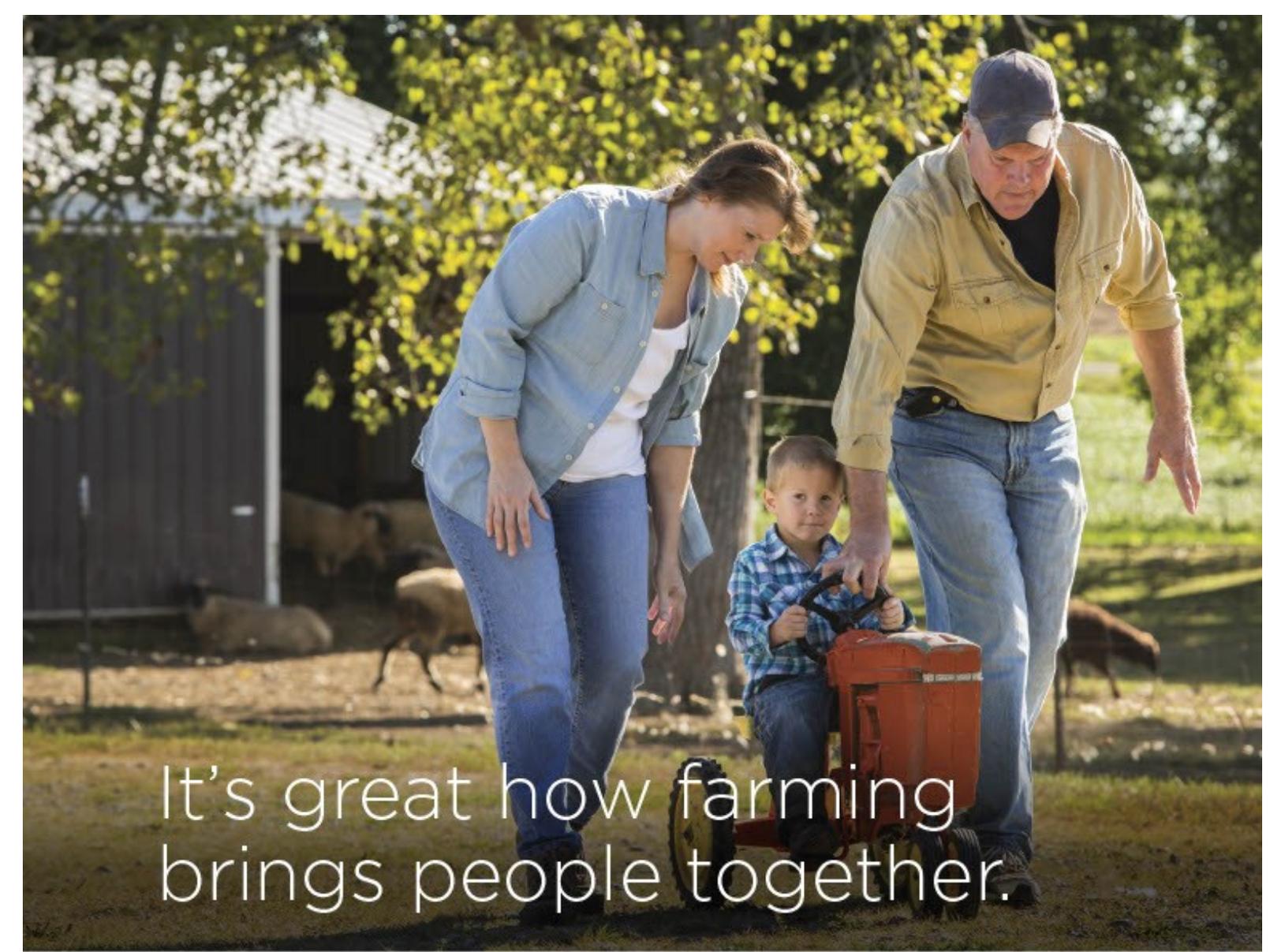
[Click here for full article](#) □

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Spotlight on Tyson Obion County



Tyson Obion County is located in Union City, TN, which is the county seat of Obion County in Northwest Tennessee, with a population of just under 30,000 residents. The town is home to many attractions such as Discovery Park of America, Dixie Gun Works, unique shopping and great

cuisine. Union City has amenities such as Baptist Memorial Hospital, quality education, and is served by all four modes of transportation (water, air, rail, and highway).

Tyson Foods' Obion County Complex includes the processing plant, wastewater treatment facility, hatchery, feed mill and live operations. The complex is the largest employer in the county with approximately 1,800 TEAM members, 100 contract growers, 90 broiler farms, 500 broiler houses, 40 breeder houses and 20 pullet houses.



The Obion County feed mill and hatchery began construction in 1995. The plant began construction in 1996 and became a McDonald's dedicated facility in the latter part of 1996. Construction of the further processing started in January 1997 and the first nugget was produced May 15, 1997. The debone department of the plant was completed in fall of 1997 and the evisceration department was completed in February 1998.

The feed mill is in South Fulton, TN about nine miles from the plant. All grain is purchased locally and the mill will deliver about 9,500 tons of feed per week to the farms.



The hatchery is 1.5 miles from the plant and hatches around 1.4 million chicks per week.

The wastewater facility is across the street from the plant and all the processed water is treated at this facility. Approximately 2.3 million gallons a day are treated to meet water quality standards that are set by the state.

The Obion County TEAM is a proud supporter of our local community and contributes to various charities through in-kind donations and fundraising activities. Approximately \$85,500 per year is donated to non-profit organizations. In addition, we host a Jr. Broiler show at our local fair where 150 or more kids raise chicks that we provide to them. They raise the birds for 6 weeks and then show them at a special event coordinated and conducted by Tyson OBC during the fair. Their chickens are then auctioned off to local businesses, poultry industry-related companies and supporters and the Tyson Obion Complex. The auction raises around \$72,000 per year that goes directly to the kids.

(continued on next page)



TPA BOARD of DIRECTORS

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WELCOME
NEW ALLIED MEMBER



Huvepharma
Evan Bartley 417-813-7212
Joe Williams 205-412-0192

Visit our website at
www.tnpoultry.org

Follow us on
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Spotlight on Tyson OBC *(continued from previous page)*

Keith Riley, Obion County Complex manager says, "I have been in the poultry business since graduating from MSU with a BS in Poultry Science in 1983. I began my career at Marshall Durbin in Tupelo MS then made moves to McCarty Foods, Jackson, MS; Keystone Foods, Gadsden, AL; McCarty Farms, Canton MS; Tyson Foods, Gadsden, AL; Tyson Foods, Springdale, AR and landed in Union City, TN in 2005 as Complex Manager for Tyson Foods. My responsibilities include the processing plant, hatchery, feed mill, and live operations. Obion County is a great place to live and raise a family. I am blessed to be with a GREAT TEAM that helps feed the world."



Shane Joyner, Live Production Manager, proudly states, "I have been fortunate to work with the same company and the same facility for 25 years. I started with Tyson in 1996 building the hatchery as an hourly employee with plans to become one of the first plant supervisors as the plant started. Instead, I've spent my entire career in live production. I've been Live Production Manager at Obion County since 2001. I've met a lot of great people in the poultry industry and have had the pleasure of being on a great TEAM. It is so exciting for me to see young people come in and grow. I love being a part of their growth and seeing them become managers and take over the complex responsibilities. WE are a GREAT TEAM! I'm proud to be part of it and proud of everyone here."

Plant Manager **Jeff Tucker** shares, "I have worked at Tyson Foods for a little over 21 years. I started as a Supervisor Trainee right after graduating from Murray State University and working at Wendy's for 10 years, along with working on the family farm. I worked my way up to the Plant Manager position after spending time in each production department in our facility, including sanitation. Our plant is strictly a McDonald's product facility that our TEAM takes great Pride in. We have a great TEAM here at Obion County that goes above and beyond with TEAM Safety and taking Care of each other. I take Pride every day in saying I am apart of one of the best TEAMS in Tyson Foods."



Tiffany Cathey, Complex HR Manager, "...began my career with Tyson in 2011 shortly after graduating from The University of Tennessee at Martin with a degree in Communications. I was the 2nd shift HR Clerk for about a year and a half before being promoted to Production Supervisor in White Meat Debone where I was able to participate in the Tyson Boot Camp program for frontline supervisors. Since then, I have had the opportunity to work in various roles with Tyson: Employment Manager, HR Generalist (Tyson Newbern), and Training Specialist. All of these roles helped prepare me for my current position as the Complex HR Manager at the Tyson Obion County Complex. While in this role, our HR and production teams have successfully completed an expansion, all during a pandemic, hiring over 1,000 TEAM Members in a little over a year! This would not have been successfully completed without the support and hard work from our awesome TEAM here at OBC."

Allen Lyle started his career with Tyson a little over 20 years ago as a cleaner/driver at the feed mill. He drove at the feed mill for a short time, then went to the hatchery and hauled baby chicks. Allen moved to live haul in 2001 and has been a driver, supervisor, and most currently for the last several years, he has been the Complex Live Haul Manager. According to Live Production Manager Shane Joyner, "Allen does a great job of promoting safety and taking care of his people. He is a great asset as a TEAM player to our complex. We appreciate everything he does." Allen and his wife Jennifer live at Reelfoot Lake in western Obion County.



Keisha Hooper started with Tyson Foods in March 2018 as Administrative Assistant to Keith Riley and the TEAM at the Obion County Complex. Keisha came on board as a TEAM player and is a great asset to our Complex. She has lived her whole life in Obion County. Keisha serves as the Vice Chairman of the Board for the Obion County Board of Education. She and her husband, Rance, are the proud parents of two children, Alexis and Harrison, who have both been very active and competitive in our Obion County Junior Broiler show. We are proud of Keisha and her daily drive to make our complex the best it can be.



(This is the fifth in a series of articles spotlighting our TPA poultry complex members. Over the next several newsletters, we plan to showcase each of our member complexes in random order.)

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ALLIED MEMBER NEWS

BioSafe Systems announces the addition of **Ross Bright** to their team. Ross is from Arkansas and has 23 years experience in the food service industry. He will be serving the Southeast region of the country.

Chore-Time has introduced direct-drive models of its innovative ENDURA® Fan. The new 57-inch direct-drive fans meet grower requests for low maintenance, while maximizing energy efficiency through variable-speed capabilities.

Merck Animal Health has announced the completion of its acquisition of PrognostiX Poultry Limited d/b/a Poultry Sense Ltd. from its founding shareholders. Poultry Sense Ltd. is an innovator in health and environmental monitoring solutions for the poultry industry. [Click here for full article](#)

NEWS FROM AROUND THE COMPLEXES

TPA Board Member and former Live Production Manager for **Pilgrim's Chattanooga**, **Brad Nance**, has accepted a new position as a Complex Manager in Training with Pilgrim's and will remain in Chattanooga. Congratulations Brad!!! **Jerry Hughes**, former Live Production Manager for Pilgrim's in Douglas, GA, will take over the reins from Brad in Chattanooga on March 15.



Stan Reid has been appointed interim President of **Cobb-Vantress**. Reid is the current Vice President of Cobb North and South America. Reid has almost 40 years' experience in the industry and has been at Cobb for 20 years. He served as a U.S. sales manager, director of sales and service, general manager of North American business, and Vice President of Asia and North American business units before eventually overseeing all global business units in 2007.



Previously serving as the Building Coordinator for **Tyson Foods Albany**, **Cody Elmore** is now the Broiler Manager. Former Broiler Manager and TPA Board Member, **Brandon Gibson**, is now the Live Manager for Tyson in Robards, KY.



Dr. Kate Hayes, former Production Program Veterinarian in Elkmont, AL, assumed the roll as VP of Veterinary Services for **Aviagen** in January 2021. Dr. Hayes is originally from Calgary, Alberta, she attended MTSU for her BS in Animal Science, the Univ. of TN for vet school and the Univ. of Melbourne for her Master of Avian Health & Medicine degree. **Justin Kelly**, former Complex Manager for **Aviagen N.A.** in Sallisaw, OK, has circled back to Elkmont, AL as their new GP Complex Manager.

Aviagen's new feed mill in Pikeville, TN plans to start up in February of 2022 and will have a capacity of 2400 tons/week. 2 million bushel of local corn will be purchased annually.

Photos courtesy of Tennessee Valley Aerials. See their ad on page 15.



DATES TO REMEMBER

USDA/REAP GRANT DEADLINE

March 31, 2021

*An energy assessment may be needed.
Get started now!*

PPP SIGNUP FOR GROWERS

DEADLINE

March 31, 2021

TPA SCHOLARSHIP FUNDRAISERS

Sporting Clays Shoot

April 7, 2021

Nashville Gun Club
Nashville, TN

Golf Tournament

April 8, 2021

Hermitage Golf Course
Nashville, TN

TPA SERVICE TECH TRAINING

June 23, 2021

Farm Bureau Expo Center
Lebanon, TN

TPA ANNUAL MEETING & SUMMER GETAWAY

August 13-14, 2021

Gaylord Opryland Resort & Convention Center
Nashville, TN

TPA GROWER MEETINGS

November 2, 2021

On the campus of UT Martin
Martin, TN

November 11, 2021

Museum Center at Five Points
Cleveland, TN

2021 TPA SCHOLARSHIP FUNDRAISERS GOLF SCRAMBLE & SPORTING CLAYS SHOOT

Sporting Clays Shoot

Nashville Gun Club
1100 County Hospital Rd.
Nashville, TN
Wednesday, April 7, 2021

Registration begins at 9 a.m.

Lunch included

Door prizes appreciated!!

Registration: \$150 per person
(includes 5 ducks)

Golf Scramble

Hermitage Golf Course
3939 Old Hickory Blvd.
Old Hickory, TN
Thursday, April 8, 2021

Registration begins at 7 a.m.

Lunch included

Door prizes appreciated!!

Registration: \$150 per person
(includes green fee/carts, mulligan, red tee)

SPONSORSHIP OPPORTUNITIES

(includes recognition and signage for both golf and shooting)

Diamond Plus - \$2500**

Diamond - \$1500**

Platinum - \$1000**

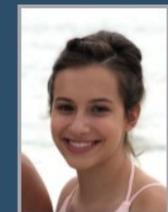
Gold - \$750

Silver - \$500

Shooting Station/Golf Hole - \$200

***As a sponsor of \$1000 or more, a scholarship can be presented in your company's name.*

2020 Scholarship Recipients



- ◆ *Since 2014, TPA has awarded over \$106,000 in scholarships*
- ◆ *All proceeds benefit TN Poultry Association scholarship program*
 - ◆ *Registration forms available at www.tnpoultry.org*

Opposition to Chicken Houses in West TN

If not aware, there have been movements in several counties in West TN to restrict and regulate the construction of new chicken houses and other CAFOs through their local boards of health. The validity of these actions and even the manner in which some of these health boards have formed have been in question. Whereas we believe the language in TN's right-to-farm statutes to be clear, and while two previous legal opinions provided by the State's Attorney Generals supported our interpretation, growing opposition continued. Led by the great leadership efforts of the TN Farm Bureau Federation, the TN Poultry Association and other commodity and ag-interest groups have worked together to stand up for TN's right-to-farm statutes. As a result, one county has conceded that their health board was not properly formed and another appears to be accepting that health boards will not be allowed to regulate agriculture.

To clarify and further strengthen the existing statutes, Sen. Mike Bell (TN's 9th District that includes Meigs, Monroe, Polk and part of Bradley Co.) and House Majority Leader - Rep. William Lamberth (TN's 44th district that encompasses part of Summer Co.) are sponsoring SB1368/HB1163 to prohibit boards of health from regulating agriculture. Please ask your local State Senator and your State Representative to fully support passage of this bill. It has passed before the first House Health Subcommittee on March 2, 2021. □

Harris named to Farm Bureau public policy staff

Tennessee Farm Bureau Federation welcomes Laura Leigh Harris as the new assistant director in the public policy division. Laura Leigh was born and raised on her family's farm in Maury County. She grew up helping her father on the farm, and also attending local Farm Bureau meetings with her grandparents. Laura Leigh attended Central High School in Columbia and then went on to receive a degree in public relations from the University of Tennessee at Knoxville. She attends Columbia First United Methodist Church.

Her responsibilities will include coordinating policy development activities and developing strategies for the organization's grassroots advocacy efforts.

Laura Leigh interned in the public policy division during the summer of 2020 and then continued her work as an intern until December, when she was hired on full-time. She is excited to be back in Maury County and working for an organization that has meant so much to her family over the years. □




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Biden Halts Trump Plan To Speed Up Processing Lines In Poultry Plants

January 26, 2021 in [HuffPost.com](https://www.huffpost.com) by [Dave Jamieson](#)

Workers and safety advocates feared the faster speeds would lead to more injuries and COVID-19 infections.

President Joe Biden struck a blow to his predecessor's legacy of deregulation on Monday, blocking a rule from the Trump administration that would have allowed faster line speeds in poultry plants as a pandemic raged.

The Trump administration proposal, put forth late last year, would have allowed more facilities to increase the maximum number of chickens processed per minute from 140 to 175. Worker safety groups and a prominent labor union had warned that raising the line speeds would exhaust already-taxed workers and lead to more injuries and COVID-19 infections.

The Biden administration announced Monday that the Agriculture Department was withdrawing the proposal as part of a regulatory review of Trump policies. A department spokesperson said in an email that the line speed measure was "one of several rules and regulations" that would be reconsidered.

The poultry industry has fought for years to achieve faster line speeds in plants, and the Trump administration hurried to complete the rule before leaving office last week. The outgoing administration sent the rule to the White House's Office of Management and Budget for review just days after the election, but now it may never see the light of day.

A study published in November found that transmission rates of the virus were worse in plants running at the higher line speeds.

The United Food and Commercial Workers union, which represents workers in poultry and other meat plants, called withdrawing the rule "a key step" in protecting essential workers.

"Even though it has been less than a week since his inauguration, President Biden is already showing the type of commitment to the health and safety of frontline food workers that the American people expect and deserve," Marc Perrone, the union's president, said in a statement.

Labor groups and Democrats were furious that the Trump administration had sought to increase line speeds during a pandemic when meatpacking workers were already getting sick with COVID-19 in alarming numbers. Food processing facilities have been home to some of the worst coronavirus outbreaks in the country.

The UFCW and safety experts warned that the Trump rule would make the viral spread even worse. A study published in November found that virus transmission rates were worse in plants that had already received government permission to run at higher speeds.

In addition to the poultry rule, Trump also issued an executive order aimed at keeping meat processing facilities open despite COVID-19 outbreaks. Meanwhile, leadership at Trump's Labor Department declined to crack down on plants where workers died, issuing only a few, small safety fines against processors.

Biden signaled last May during the presidential campaign that he saw faster lines as a dangerous cash grab by the meat companies.

"Whether it's cattle, whether it's beef, whether it's pigs, whether it's chicken, they're moving down that line faster and faster and faster to increase the profit rate," the then-candidate said during a Yahoo News town hall. "People are getting sicker. People are getting hurt. The very thing we should be doing now is making sure these people are protected."

Despite criticism from worker groups, the idea of a line speed increase used to enjoy some bipartisan support. The Agriculture Department had considered such an increase under the Obama administration, with the backing of then-Agriculture Secretary Tom Vilsack. Biden has chosen Vilsack to be his own agriculture secretary.

The environmental watchdog Food & Water Watch applauded Biden's decision to stop the Trump version of the rule from moving forward, but given Vilsack's history, the group said it would remain "diligent and aggressive in holding this administration accountable." □

NCC responds to administration's pause on poultry line speed rule

January 29, 2021 NCC News Release

The Biden administration last Friday announced it was pausing a USDA rule that would allow an increase in the maximum line speed for poultry processing plants up to 175 birds per minute (BPM) in those plants participating in the New Poultry Inspection System (NPIS).

In response to the announcement, NCC released the following statement:

"This action by the administration is a standard process that every incoming administration does – issue a temporary regulatory freeze to assess all rulemakings currently under way, review them in light of administration priorities, and then decide whether to move forward. We are hopeful that it will move forward.

"It would be unfortunate for the new administration to ignore three decades of science, data, and court decisions, in a move that would hamstring the U.S. poultry industry on a global scale. This might have been the most deliberative and studied rule that has ever been proposed. *(continued on next page)*

NCC responds to administration's pause on poultry line speed rule *(continued from previous page)*

"Line speeds of up to 175bpm have been utilized in the U.S industry for more than two decades, put forward by the Clinton administration. The modernized system has been studied, debated, and reviewed in depth for 25 years to assure its effectiveness in further modernizing chicken inspection while improving food safety and protecting workers.

"While the poultry industry has been safely increasing line speeds over the past 25 years, our injury and illness rate has fallen 86 percent and is now at an all-time low, according to the most recent data from the Department of Labor. In fact, it is now lower than the "all-manufacturing" category for the first time ever. The line speeds in question deal with a part of the plant (evisceration) that is almost entirely automated today.

"There is also established scientific data – reinforced by [a new study](#) – demonstrating that evisceration line speeds do not affect food safety."

For more information about chicken line speeds, visit the National Chicken Council's FAQ by clicking [here](#).

To watch a short video about chicken line speeds, click [here](#). □

How collaborative robots could simplify poultry processing

January 25, 2021 in [WattAgNet.com](#) by Elizabeth Doughman

Collaborative robotic technology is one of the most popular new trends in automation because of the innovative ways it has helped companies address production challenges.

[Click here for full article](#) □

New Cobb App Works to Help Customers Succeed with Easy Access to Flock Management Software and Expertise

The new Cobb Flock Management app is the latest technology designed to help customers achieve more yield, better feed conversion and healthy flocks.

[Click here for full article](#) □



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U.S. Senate Confirms Tom Vilsack as Biden's Agriculture Secretary

February 24, 2021 from Urnerbarry.com

The U.S. Senate has confirmed Tom Vilsack to head the Department of Agriculture, returning the former Iowa governor to the job he held under former President Barack Obama.

The 100-member Senate approved Vilsack 92-7. As secretary of the department, Vilsack will oversee about 100,000 employees responsible for food stamps, crop insurance, land conservation, and more. Vilsack has said the White House wants to tap a pool of funds to support on-the-farm efforts to fight climate change, a policy priority for President Biden.

[Click here for full article](#) □

Secretary of agriculture designee Tom Vilsack fields questions from Senate Agriculture Committee during hearing Tuesday

February 2, 2021 in BeefMagazine.com by Jacqui Fatka

Giving a nod to Groundhog's Day, Obama administration Secretary of Agriculture Tom Vilsack again appeared before the Senate Agriculture Committee Tuesday for his nomination hearing to assume the role of ag secretary in the Biden administration. He says he goes into the process recognizing it is a different time, he's a different person and it is a different department.

During the over 2.5 hours of questioning from ag committee members, Vilsack started off his opening comments identifying the "why not" opportunities for the agricultural industry to embrace, including climate change, food security, expanding markets and addressing inequities. The Senate Agriculture Committee unanimously approved his nomination later in the day Tuesday, clearing the way for a full Senate vote on his nomination anticipated in the coming days.

Climate change was a major theme posed by committee members including Senate Agriculture Committee Chairwoman Debbie Stabenow, D-Mich., who introduced the Growing Climate Solutions Act with Sen. Mike Braun, R-Ind., last year. Stabenow reaffirmed what was included in her bill that whatever is done for farmers must be voluntary, producer-led and bipartisan.

Vilsack says he shares President Joe Biden's view that agriculture can reach net-zero emissions and by doing so can also provide a competitive edge to increasing domestic and international demand for sustainability. He says many proposals can be implemented administratively on the climate front, including creating an advisory group of farmers to better understand how to structure a carbon bank to adequately measure and quantify actions taken to sequester carbon.

"I think agriculture is the first and best way to begin getting some wins in climate areas," Vilsack says.

Vilsack says the Commodity Credit Corporation is a great tool to create some kind of structure for providing a carbon market system that pays farmers for actions taken. He also recognizes there are some concerns that a carbon sequestration bank would benefit investors or third-party entities.

"Whatever program we put together has got to include farmer input and at the end of the day benefit farmers. If it does, I think there will be wide adoption," Vilsack says.

In response to questioning from Braun, Vilsack adds, "I do believe we are on the cusp of series of new market opportunities that will provide greater resilience in the system, more income opportunities for farmers and do right by the environment and create more jobs." He says he hopes to work with those in Congress and with the president who he believes has the right vision.

"I do believe we have enormous new opportunities that will allow the family farm to stay in business and pass it onto the next generation which I believe most farmers are anxious to do," Vilsack says.

Biofuels future bright

Another major point of discussion from members on both sides of the aisle includes support for biofuels in questioning from Sens. Amy Klobuchar, D-Minn., Chuck Grassley, R-Iowa, Tina Smith, D-Minn., John Thune, R-S.D., and Joni Ernst, R-Iowa.

Vilsack says the biofuels future looks bright and opportunities exist including to expand marine and aviation inclusion of biofuels. He also says despite a commitment to increase electric vehicles, that too will still require energy and opportunities to promote renewable energy.

"We need an alternative fuel source in addition to and complement our efforts on electric," Vilsack says. "Over a long period of time we're going to need both."

Vilsack's vocalized commitments to utilizing and increasing resources to build out infrastructure for higher ethanol blends and looking for opportunities to help ethanol producers hurt from the economic fallout of COVID-19.

He also says he would expect this administration to limit the use of the small refinery exemptions that scaled-back blending of biofuels in recent years. The future direction of the Renewable Fuel Standard will also be important for this administration in 2022 when it faces renewal. *(continued on next page)*

Secretary of agriculture designee Tom Vilsack fields questions from Senate Agriculture Committee during hearing Tuesday *(continued from previous page)*

Vilsack doesn't expect he'll to have to be too persuasive in the Oval Office to have the President stay committed to the RFS and stand to follow through on campaign promises to biofuels. "I think there is a future for this industry."

"Biofuels continue to play role in reducing emissions and providing job opportunities in all parts of the country," Vilsack testifies.

Livestock market issues

Several Republican members brought up issues of packer consolidation at the livestock level and cited recent shortfalls revealed during the COVID pandemic on supply chain constraints.

In response to questioning from Grassley, who has introduced a bill to increase market transparency, Vilsack promised to look at every tool available to USDA to ensure openness and transparency in markets. He also says he would consider working collaboratively with the Department of Justice on issues of antitrust if warranted.

"There's no question we need to strengthen the laws designed to create more openness, more transparency and price discovery," Vilsack says in response to Sen. John Hoeven, R-N.D. But he says that isn't enough and also promised to look at ways to promote the expansion of smaller processing facilities.

When one or two processing facilities shut down it created havoc in the market. "We can't have that. We have to have a more resilient food system and, in my view, we need to look for ways to incent and encourage more processing facilities," he says.

Another hot topic addressed the Product of USA label and beef producers' desire to see that strengthened. Vilsack responded that he attempted three different times during his previous tenure to strengthen the country-of-origin labeling but was struck down by the World Trade Organization and would have faced retaliatory measures from Canada.

He says he's willing to listen to ways to try and create a WTO-compliant labeling system that allows for better information to consumers. □

Vilsack: Agriculture Poised for First and Best Wins on Climate

February 2, 2021 in [TheDailyScoop.com](https://www.thedailyscoop.com) by John Herath

As Tom Vilsack appears before the Senate Agriculture Committee in pursuit of a return to helm USDA, he is making clear the importance of addressing climate change to his vision for the department. He says farmers stand ready to make strides in addressing climate if they are given voluntary opportunities. "I think agriculture is probably the first and best way to begin getting some wins in this climate area," Vilsack says. "I think farmers are prepared for it. Farmers are anxious to do it, if it's voluntary, if it's market based, if it's incentive based, I think you will see farmers, ranchers and producers cooperate extensively."

[Click here for full article](#) □

Biden selects Michael Regan to lead EPA

December 18, 2020 in [FeedStrategy.com](https://www.feedstrategy.com) by Ann Reus

President-elect Joe Biden has nominated Michael Regan to lead the Environmental Protection Agency (EPA). Regan has been the secretary of the North Carolina Department of Environmental Quality (DEQ) since 2017, has worked on clean energy initiatives for the Environmental Defense Fund and began his career as an EPA staffer during the Clinton and George W. Bush administrations. He earned his undergraduate degree from North Carolina Agricultural and Technical State University and his master's degree in public administration from George Washington University.



[Click here for full article](#) □

Climate-Smart Ag Will Reduce GHG Emissions, Report Says

February 9, 2021 in [Drovers.com](https://www.drovers.com) by Greg Henderson

A new report suggests investments and partnerships in agriculture could help reduce U.S. GHG emissions by two-thirds by encouraging widespread adoption of climate-smart practices on farms and ranches.

[Click here for full article](#) □



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An Assessment of the Energy Sector in TN

The Tennessee State Energy Policy Council, in partnership with UT-K's Howard H. Baker Jr. Center for Public Policy, has released a report titled, "[An Assessment of the Energy Sector in Tennessee.](#)" The report provides a detailed, data-driven analysis of the state's energy sector and includes an examination of energy consumption (by energy source and end-use sector), electricity generation, available resource base, job benefits from the state's energy sector, environmental and health issues, and a comparison of Tennessee to other states in the Southeast. □

The Ag Watchdog Newsletter

February 20, 2021

Bill Gates Calls for Total Switch to Fake Beef

Bill Gates has called on the US and Europe to ditch real beef entirely. In [an interview](#) about his new book, Gates admits that greenhouse gas emissions are lower for U.S. beef than Third World beef, he still argues, "I do think all rich countries should move to 100% synthetic beef." Gates acknowledges advocates may need to "use regulation to totally shift the demand."

Former UN Climate Chief Joins Fake Meat Company

Christiana Figueres, former United Nations climate czar, has [joined the board of directors](#) of Impossible Foods. She may help Impossible's issues with genetically modified ingredients in Europe, which is notoriously anti-GMO. The move is also more evidence that the environmental narrative against meat will take center stage. □



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The [EU] Green Deal: Potential impact on the feed industry

January 11, 2021 in [AllAboutFeed.com](#) by Treena Hein

A look at its many significant expected and potential impacts on the feed industry in Europe.

[The European Union's Green Deal](#) will affect all sectors of the EU economy, including farming and livestock feed. It is described officially as "a new growth strategy that will transform the Union into a modern, resource-efficient and competitive economy, where there are no net emissions of greenhouse gases by 2050, economic growth is decoupled from resource use, and no person and no place is left behind."

The Deal is directing the EU feed industry to achieve many goals. These include the production of diets with lower amounts of protein and phosphorus (resulting in less excretion of nitrogen and phosphorus) and the increased use of local ingredients. The use of 'sustainable' alternative proteins, such as unicellular and [insect](#)-based proteins is also desired. In addition, the Green Deal also has a legislated target of 25% organic food production in the EU by 2030, which will require an increase in organic feed production.

However, in a new report called [Economic and Food Security Impacts of Agricultural Input Reduction Under the EU Green Deal's 'Farm to Fork' and Biodiversity Strategies](#), the US Department of Agriculture's Agricultural Research Service suggests that the Deal will reduce both EU agricultural production and its competitiveness in domestic and export markets.

FEFAC response

In terms of how members of FEFAC (which represents the European compound feed & premix industry) will align with the Deal by further lowering the amount of protein and phosphate in compound feeds, FEFAC Secretary General Alexander Döring explains that long-running efforts will accelerate.

Feed companies will also ramp up use of science and technology to become more efficient. Alltech points to "a large cooperative feed mill in Spain," which has consulted with Alltech and Dr Frank Mitloehner of the University of California (Davis) about how it might improve production efficiency. This feed mill is now using technologies such as InTouch digital IOT Technology and Alltech E-CO2. Alltech Europe Growth Officer Robbie Walker says "this approach has put them ahead of the curve in conforming to the Green Deal requirements. It has also provided them with enhanced value proposition for the sale of their products to consumers who are demanding a more sustainable future." (continued on page 47)

Money for retrofits and upgrades

USDA/REAP: The deadline for applying for REAP grants is March 31, 2021. The time to act is now. Retrofit projects and upgrades to equipment to enhance energy efficiency are eligible for consideration, including insulation, ventilation, increased static pressure, heating, cooling, motors & pumps and LED lighting. <https://www.rd.usda.gov/programs-services/rural-energy-america-program-renewable-energy-systems-energy-efficiency/tn>

For project requests under \$200,000 an energy assessment is required to have been completed at the time of application. TVA will conduct these energy assessments for free. Act now and line this up well ahead of the deadline. For requests over \$200,000 an energy audit is required and will take more time to coordinate. NRCS will consider cost-sharing on energy audits, however that application deadline was back in Dec. of 2020 and the date for 2021 has not been set yet. This will obviously take more long-range planning to make happen. Everyone is encouraged to discuss your project ideas well in advance with your area field office at https://www.rd.usda.gov/sites/default/files/TN_ContactsMap_AO-AD_0.pdf. Or, if in TN, contact the energy coordinator, Charles Morris, directly at (865)291-9527. Grant money (“cost-share”) and loans are available through this program. For those who do not live in TN please note that the application deadline may differ for your state.

TAEP: The deadline for the next Ag Enhancement Program application period in TN has not been announced yet, but it has been Oct. 1-7 the last few years. Put this on your calendar to be watching for announcements in Sept.! We continue to have growers tell us that they did not know about the program or the deadline and we do all we can through our newsletters and email reminders to get the word out. Those who have a good working relationship with their local county Extension offices should be receiving notifications from them, as well. Growers were eligible for up to \$6000 in reimbursement on approved purchases (of up to \$17,210) this year (Oct. 1, 2020 – through Aug. 2021), and up to \$10,000 in previous years. This is a TN program only (funded by TDA through TN’s tobacco settlement program). Applicants must reside in TN, even if their poultry operation is in TN, to be eligible.

Plan of action: Take action now! Get these dates on your calendar and set reminders. Initiate the phone calls if you think you may want to pursue a REAP grant. Find out if you need an energy assessment or audit and get that started without delay. Make plans to contact your local FSA office, your local NRCS office and your county extension agent this month just to talk, see how they can help you and let them know what you need. These offices can further assist in leading you through the above and whatever else might be available that can help you to get ahead. It is what they are there to do as funded by your tax dollars. □

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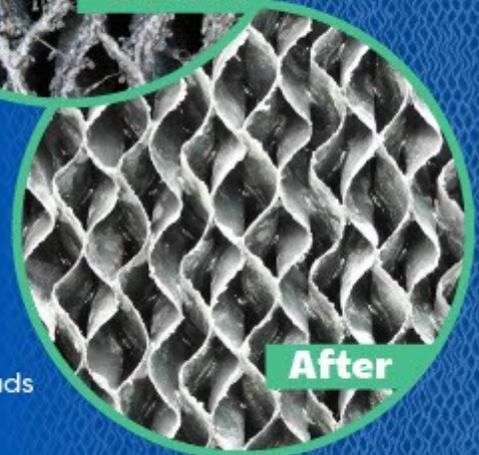
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Holt Joins Tennessee Department of Agriculture



NASHVILLE – Tennessee Agriculture Commissioner Charlie Hatcher, D.V.M. has announced the addition of Andy Holt to the Business Development Division of the Tennessee Department of Agriculture (TDA). Holt will serve as Director of Business Development in support of economic development initiatives, as well as agriculture and forestry industry expansion.



“Rural economic development and recovery from the pandemic are priorities of the Department and Governor Bill Lee,” Commissioner Charlie Hatcher, D.V.M. said. “TDA has been given the opportunity to lead projects focused on these priorities and the addition of Andy Holt will be a significant enhancement to our work. Andy’s personal and professional experience in

farming, along with his education in agriculture and economics, will support our efforts towards recruitment, recovery, and expansion.”

[Click here for full press release](#) □

UTIA Appoints New Dean of UT Extension

December 7, 2020 in [Extension.Tennessee.edu](https://extension.tennessee.edu) by Lisa Stearns



KNOXVILLE, Tenn. — A veterinarian, beef industry partner and expert in teaching and community engagement has been chosen as the new dean of UT Extension in the University of Tennessee Institute of Agriculture.

Ashley M. Stokes, DVM, Ph.D., MBA, who currently serves as the associate vice president for engagement and deputy director of Colorado State University Extension, will begin her new role as the leader of UT Extension February 22, 2021. Tim Cross, senior vice president and senior vice chancellor of UTIA, announced in a letter to faculty, staff and stakeholders.

[Click here for full press release](#) □



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Secretary Perdue Statement on MOU on Animal Biotechnology

(Washington, D.C., January 19, 2021) – U.S. Secretary of Agriculture Sonny Perdue issued the following statement after signing a [Memorandum of Understanding](#) (PDF, 141 KB) with the Assistant Secretary for Health and Head of the Public Health Service Admiral Brett Giroir, M.D., establishing a regulatory environment at the Department of Agr for agricultural animal biotechnology innovation:

“Today’s Memorandum of Understanding clears a path to bring our regulatory framework into the 21st century, putting American producers on a level playing field with their competitors around the world. In the past, regulations stifled innovation, causing American businesses to play catch-up and cede market share,” said Secretary Perdue. “America has the safest and most affordable food supply in the entire world thanks to the innovation of our farmers, ranchers and producers. Establishing a new, transparent, risk and science-based regulatory framework would ensure this continues to be the case.”

Background:

Today, the U.S. Department of Agriculture (USDA) announced the finalization of a Memorandum of Understanding (MOU) with the U.S. Department of Health and Human Services’ Food and Drug Administration (FDA) outlining responsibilities concerning the regulation of certain animals developed using genetic engineering that are intended for agricultural purposes (such as human food, fiber, and labor). This MOU complements USDA’s issuance of an Advanced Notice of Proposed Rulemaking (ANPR) on the Movement of Animals Modified or Developed by Genetic Engineering on December 28, 2020.

Agricultural biotechnology holds tremendous potential to improve animal health, enhance farm productivity, improve nutrition, and even reduce the need for some animal health measures. USDA and FDA have a long history of delineating the review of products with overlapping jurisdictional authority between the two agencies to promote regulatory clarity and reduce duplicative review. USDA and FDA are committed to working together to foster safe use of this promising technology and encourage innovation.

The terms of the MOU support USDA’s ANPR outlining a contemplated regulatory framework that would apply to certain animals (cattle, sheep, goats, swine, horses, mules, or other equines, catfish, and poultry) developed using genetic engineering intended for agricultural purposes. Under this framework, USDA would safeguard animal and human health by providing end-to-end oversight from pre-market reviews through post-market food safety monitoring for certain farm animals modified or developed using genetic engineering that are intended for human food.

The MOU also allows for the transition of portions of FDA’s pre-existing animal biotechnology regulatory oversight to USDA. USDA would continue to coordinate closely with FDA to fulfill oversight responsibilities and provide the appropriate regulatory environment, ensuring the safety of products derived from new technologies and fostering innovation at the same time. As always, FDA would continue its review of intentional genomic alterations intended for any purpose other than agricultural use, such as biopharma and non-heritable genomic alteration, and the regulation of dairy products, table and shell eggs, certain meat products, and animal food (feed) derived from animals developed using genetic engineering. □

Gene editing tool could protect against avian influenza

December 10, 2020 in [WattAgNet.com](#) by Elizabeth Doughman

Outbreaks of the viral disease were recently reported in 15 European and two Asian countries.

A groundbreaking project plans to harness emerging gene editing technology to develop genetic resistance in chickens against avian influenza.

“We aim to use genome editing technologies to design poultry with genetically-innate characteristics of influenza-resistant traits,” said Yehuda Elram, CEO & Co-Founder of [eggXYt](#).

“The technique exploits the nature of known gene-silencing mechanisms in cells called RNA-interference (RNAi). Using genome editing tools we genetically redirect the RNAi mechanisms to specifically interfere with virus genes in infected birds. This way the virus will be impaired and unable to replicate in the bird.”

The true cost of avian influenza

Avian influenza is one of the deadliest and most costly avian diseases. The [2015 U.S. outbreak](#) led to the slaughter of 50 million birds, costing more than \$3.2 billion. The disease is zoonotic – so workers are also at risk of getting sick when outbreaks occur.

“While there are preventative measures, such as vaccines, these are not sufficient in preventing outbreaks, and when outbreaks do unfortunately occur, the only way to prevent more spread is to ‘stamp out’ all exposed (and all potentially exposed) poultry, which comes with a hefty financial and ethical price,” Elram explained.

“Outbreaks are not only costly, but they are also becoming more frequent, occurring with increased frequency since the disease’s identification.”

Fifteen European countries, including France, Poland, Germany and the United Kingdom, and at least two Asian countries have reported [highly pathogenic avian influenza \(HPAI\) outbreaks](#) this winter. (continued on page 22)



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Gene editing tool could protect against avian influenza *(continued from page 20)*

An innovative approach to disease resistance

The [gene editing approach](#) makes precise, specific changes to nucleotides located within non-coding genomic locations on an organism's DNA. These changes redirect genetic activity, in this case targeting the genes of known pathogens, like avian influenza.

"Genome editing technologies enable scientists to make very specific and precise changes to the DNA, leading to changes in physical traits. These technologies act like scissors, which allow us to cut the DNA at a very specific spot. Thereafter, scientists can very precisely add, remove or replace the DNA at the cutting site," Elram said.

The technology is already in use by [Tropic Biosciences](#) to [protect crops against invasive diseases](#). □

Gene editing to enhance production in developing nations

February 10, 2021 in [PoultryWorld.net](#) by Tony McDougal

Poultry production in low to middle income nations could substantially benefit from transferring beneficial genes between breeds to produced offspring with useful characteristics, researchers claim.

Sterile male and female chicken eggs have been implanted with reproductive cells from donor birds with the resulting chickens mated together to produce chicks of the donor breed. The chicks showed characteristics inherited from their real parents, the donor birds, along with the edited change to their DNA, rather than their surrogate parents. The gene editing outcome demonstrates an efficient way to introduce beneficial characteristics, the scientists claim, such as tolerance for warm climates or disease resistance.

[Click here for full article](#) □

Genetic insights could help tackle campylobacter in chicken

February 3, 2021 in [PoultryWorld.net](#) by Tony McDougal

UK scientists claim they have identified regions in the genetic make-up of chickens that are linked to resistance to Campylobacter.

[Click here for full article](#) □

UK supermarket rolls out animal welfare app

February 24, 2021 in [PoultryWorld.net](#) by Tony McDougal



UK supermarket has launched an app to manage and improve opportunities animals have to a good, enriching life.

The company, which is the current holder of Compassion in World Farming's "best retailer" in Europe award, hopes the app will lead to further improvements to animal welfare standards across the UK. It has been developed at Scotland's Rural College (SRUC) and there are 6 versions for different species – laying hens, broilers, dairy cows, veal calves, ducks, and pigs, with others in the pipeline.

How does the app work?

Trained welfare assessors visiting 1,800 Waitrose farms will use the app – the first of its kind – to record how animals express their emotions through behaviors such as relaxation, tension, playfulness or anxiety.

Animals are observed and given a score on the individual terms that have been created for that specific species – farmers and producers have been working together to come up with common terms to describe species' emotions.

Each term has a negative to positive sliding scale that allows assessors to capture the state of the animal they are observing.

When they have finished scoring, assessors submit the data, which is integrated into data from other farms. The larger pattern which is then created is then used to assess quality of life.

Rigorous research

Although the app itself is designed to be practical and easy-to-use on-farm, it is underpinned by rigorous scientific research, known as "Qualitative Behavioral Assessment" (QBA). Creator and SRUC lead scientist Françoise Wemelsfelder said: "Good physical health is vital for good welfare, but there is clear consensus among the scientific and animal welfare community that factors such as enjoyment, contentment, and positive excitement play an equally vital role in ensuring that an animal has a good life. It's critical that we recognize farm animals as sentient creatures capable of experiencing a range of emotions and positive experiences.

While this remains very much in development, the fact that the app will be trialed and developed at scale with a leading supermarket chain is an incredibly significant and positive step for the industry."

James Bailey, Waitrose executive director, said it was the first time a retailer had explored welfare measures based on the concept of an animal's freedom to express positive emotions: "In some countries, farm animals continue to be looked upon as food production systems that need to be managed. This is wrong and for the UK to continue its position as a leader in farming standards, it's critical that we recognize farm animals as sentient creatures capable of experiencing a range of emotions and positive experiences."

10-year strategy

The project forms part of Waitrose's new 10-year agriculture strategy, which – among other ambitions – sets out to give animals good and enriching lives, to pay farmers fairly, to ensure all raw materials are responsibly sourced, and to reduce greenhouse gas emissions. *To find out more about the app, click [here](#).* □



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How to check day-old chick quality?

October 7, 2020 in [PoultryWorld.net](https://www.poultryworld.net) by Fabian Brockotter

Getting off to a good start with a new flock needs good preparation, but it is also dependent on the quality of the day-old chicks arriving from the hatchery.

A good assessment of this quality is essential to be able to estimate what you can get out of the flock and what extra actions can be taken.

For that, it is good practice to:

- Pick up chicks from various trays upon arrival on farm for a proper assessment all around
- Weigh 5% of the chicken trays for a good idea of the initial weight of the day-old chicks
- Pay attention to uniformity
- Counting the chicks in at least 5 trays gives you the possibility to determine the exact number of chicks you received. Sometimes numbers can be off, distorting water and feed consumption data later on.

9 essential checks to get it right

1. Reflex: Lay a chick on its back. It should stand up within 3 seconds.
2. Eyes: Should be clean, open and shiny, not dull or closed
3. Navel: Should be closed and clean, not with remnants of yolk or open
4. Feet: Should be normal color and not swollen and feel warmer than your cheek
5. Beak: Should be clean with closed nostrils, without red spots on the beak or malformations
6. Yolk sac: Stomach should be soft and malleable, not hard
7. Down: Should be dry and shiny, not wet and tacky
8. Uniformity: All chicks should be the same size; more than 20% too light or too heavy is a bad start
9. Vent temperature: Should be 40°C 2-3 hours after arrival □

The Importance of Monitoring Chicks Water Usage

December 23, 2020 in [ZooTechnicalInternational.com](https://www.zoo-technical.com) by Michael Czarick, Brian Fairchild, Connie Mou - Univ of GA

Getting chicks off to a good start is very important to overall flock performance. At no time does a bird grow faster than during the first week of its life. Over the last week of a 42-day-old flock, a bird's weight will increase by approximately a third. In contrast, a chick's weight will typically increase approximately four-fold, possibly more, by the time it reaches seven days of age. This very high growth rate during the first week is only achievable if the chicks have access to plenty of water.

[Click here for full article](#) □

Seasonal Management in Hatchery Critical to Improving Chick Viability

October 12, 2020 in [PoultryHealthToday.com](https://www.poultryhealthtoday.com)

Optimizing hatchery conditions throughout the year is crucial to limiting chick mortality and maintaining long-term bird viability, according to a poultry health expert.

[Click here for full article](#) □

Hormone analysis technique can rapidly sex chicks in ovo

December 16, 2020 in [WattAgNet.com](https://www.wattag.net) by Elizabeth Doughman

Hormone-based sexing could sex male chicks before they are hatched, helping to reduce or even eliminate male chick culling at layer farms.

[Click here for full article](#) □

Germany to Ban Culling of Day-Old Male Chicks Next Year

February 4, 2020 in [PoultryWorld.net](https://www.poultryworld.net) by Tony McDougal

German Agriculture Minister Julia Klockner has announced that the culling of day old male chicks will be outlawed from next year. Speaking to mark the start of Germany's International Green Week, Klockner said the Cabinet had signed a draft law prohibiting the mass culling of day old male chicks, making the country the first in the world to do so. Farmers will be required to use technology to prevent male chicks from being born in the first place, by identifying the sex of the animal before it has hatched. From 2024, the draft law will also require poultry farmers to use methods that work at an earlier stage in the incubation process, preventing pain for the unhatched embryos. At present, about 45 million male chicks are culled in Germany every year as they are neither suitable for meat production nor for the layer industry.

[Click here for full article](#) □



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In-Ovo Corticosterone Alters Body Composition in 35 Day Old Chicken Meat Birds

January 12, 2020 in ZootechnicalInternational.com by J.L. Angove, et al

Increasing evidence suggests early-life exposure to maternal stress can permanently alter the development of an embryo. Such findings have significant application to the chicken meat industry. Therefore, an in-ovo study was developed to investigate the effects of maternal stress in chicken meat birds on subsequent progeny performance traits.

[Click here for full article](#) □

Hyperspectral imaging could simplify meat quality analysis

February 2, 2021 in WattAgNet.com by Elizabeth Doughman

[Excerpts from this article include:]

“Basically, hyperspectral imaging is a form of spectroscopy that allows you to see different wavelengths in the light spectrum. This information can be used to reveal the chemical composition of an object, like a piece of poultry, providing information on composition, freshness, tenderness and even identify meat quality issues like woody breast.”

“Hyperspectral imaging is better at detecting more kinds of foreign material contamination than x-rays and can be used in place of human inspectors on the line.”

[Click here for full article](#) □

Research shows fly larvae can improve leg health

December 21, 2020 in PoultryWorld.net by Matthew Wedzerai

A recent study investigating the effect of scattering fly larvae in litter at Wageningen University used live black soldier fly larvae as an environmental enrichment tool.

[Click here for full article](#) □

Four Common Poultry Leg Issues Explained

January 6, 2021 in WattAgNet.com by Elizabeth Doughman

Leg problems are a prevalent cause of mortality, production losses and welfare issues in chickens and turkeys. They can be caused by several conditions – such as spiral fractures of the tibia or femur and lameness – or by disorders like pododermatitis, fractured femurs, fractured tibia, tibial dyschondroplasia and spondylolisthesis.

[Click here for full article](#) □

Pulsed Ultraviolet Light Technology Can Decontaminate Eggs

February 5, 2021 in WattAgNet.com by Elizabeth Doughman

Pulsed ultraviolet light could be a viable alternative to current antimicrobial technologies used to kill pathogens on eggshells, according to a recent study published in Poultry Science. The technology was successfully tested in simulated production conditions at Pennsylvania State University and is designed so it can be easily scaled up or customized for commercial installations.

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Studies in 32 million birds show returns on vaccinating broilers from *E. coli*

October 22, 2020 in [PoultryHealthToday.com](#)

Vaccination has been shown to protect broilers from *Escherichia coli* infection, but is introducing a new vaccine worth the cost? According to studies involving millions of birds in the US and Italy, the answer is a resounding yes, said Silvia Alberti, DVM, poultry technical manager at Zoetis. Vaccinated birds showed consistent improvements in feed conversion, mortality rates, and condemnations, proving the investment is worthwhile, she added.

[Click here for full article](#) □

Global change in day-old broiler chick vaccination practices

December 21, 2020 in [PoultryWorld.net](#) by Kannan Ganapathy & Chris Ball

In global chicken farming, other than avian influenza, Newcastle disease (ND) and Infectious Bronchitis (IB) are considered the most economically important diseases. According to evidence-based publications and survey results, global day-old broiler chick vaccination practice has been shifting from IBMass+ND to co-vaccination with IBMass+IBVariant+ND.

[Click here for full article](#) □

Marek's disease vaccination needed now more than ever

December 9, 2020 in [PoultryHealthToday.com](#) by Guillermo Zavala, DVM

Relaxing Marek's disease (MD) vaccination programs could badly backfire on producers reconsidering the value of protecting birds against the disease, according to Guillermo Zavala, DVM, PhD, president, Avian Health International.

In an article written for *Poultry Health Today*, Zavala said MD rates are currently low because the industry has been vaccinating consistently for almost 50 years. Any interruption to that process would cause those figures to “progressively deteriorate.”

[Click here for full article](#) □

Robust challenge studies demonstrate efficacy of new recombinant vector vaccine for IBDVs

January 25, 2021 in [PoultryHealthToday.com](#)

A new recombinant vector vaccine provides early protection against variant, classic and very virulent infectious bursal disease viruses (IBDVs), robust challenge studies demonstrate.

“Poulvac[®] Procerta™ HVT-IBD provides an updated tool for protecting flocks against the strains of IBDV circulating among US broilers flocks, including the predominant AL2 variant,” Angela Hartman, PhD, Zoetis, told *Poultry Health Today*.

[Click here for full article](#) □

Pathways to Protection: How One Vaccine Decision Can Affect Options for Managing Other Diseases in Broilers

January 28, 2021 in [PoultryHealthToday.com](#)

Broiler operations naturally want to provide the best disease protection for the least cost but deciding which vaccines to use and when can be a daunting task. Poultry Health Today asked two experts with extensive experience evaluating vaccination programs on hundreds of farms — Kalen Cookson, DVM, MAM, and Lloyd Keck, DVM, ACPV — for help in navigating the path to sensible, strategic and cost-effective disease protection.

[Click here for full article](#) □

Essential Adjustments That Improve IB Vaccine Efficacy in Broilers

May 7, 2020 in [PoultryHealthToday.com](#)

A few essential adjustments in the way infectious bronchitis vaccines are handled and administered at the hatchery can improve vaccine efficacy, Brian Jordan, PhD, assistant professor, University of Georgia, told Poultry Health Today. “Frozen vaccines that come out of liquid nitrogen have to have a little bit more care,” Jordan cautioned.

[Click here for full article](#) □

Controlling infectious bronchitis in broilers starts with breeder vaccination

April 3, 2020 in PoultryHealthToday.com

Protocols vary widely, but vaccinating broiler breeders against infectious bronchitis virus (IBV) remains an important strategy for protecting broiler progeny against the virus, according to panelists at a roundtable on “Infectious Bronchitis: Evolving strategies for an evolving virus.” Guillermo Zavala, DVM, PhD, founder of Avian Health International and an adjunct professor, University of Georgia, said although IBV maternal-antibody transfer isn’t very protective for progeny, it probably contributes partially to protecting young broilers as well as protecting breeders. “It wasn’t until we introduced the [IBV] Arkansas vaccine in the breeder population that things were buffered in broilers a little bit,” he said at the roundtable. Zavala said it’s interesting that among poultry companies in Georgia, most rely on live vaccines and don’t use killed vaccines for bronchitis protection. “I think it’s very important to complement vaccination with killed vaccines and, of course, to use an array of strains that will help you increase broad protection, if you can.”

Extended immunity

Asked if using killed vaccines in breeders expands protection to broilers, Zavala said they may not “expand the spectrum of protection, but you can certainly raise your antibody levels. You can also extend the longevity of that immune response...” he added. Sarah Tilley, DVM, Fieldale Farms, said her company vaccinates pullets and breeders with IBV strains they and their progeny will encounter. During the pullet-rearing stage, they vaccinate birds at 3, 7 and 16 weeks of age with multiple, live IBV strains, which are different combinations of IBV Arkansas, Georgia 98 and Massachusetts. The strategy, she explained, is to expose birds to multiple strains before going into lay. In the pullet phase, they administer live IBV and Newcastle disease (ND) vaccines 5 to 7 days apart to prevent replication-site interactions. Once moved to the hen house, breeders are boosted with a live IBV/ND program every 10 weeks. They obtain routine serology from breeders at 26 and 58 weeks of age to monitor immunity to IBV, ND virus, infectious bursal disease virus and reovirus to see what hens have been exposed to, she said.

‘Takes the edge off’

David French, DVM, formerly with Sanderson Farms and now with the University of Georgia, said vaccination protects breeders against IBV while they are in production, and it also “takes the edge off” the IBV vaccine administered to broilers. “We use a killed vaccine in breeders,” he said, because using a live bronchitis vaccine might contribute to eggshell-quality problems.

Mark Burleson, DVM, Wayne Farms, said his company’s breeders received a live IBV vaccine at 2, 6, 10 and 16 weeks of age. “They get nothing else for the life of the bird. We collect serology at 26 and 50 weeks and we do see some increasing titers from time to time, but we haven’t pinpointed bronchitis as being a major cause of any kind of eggshell or production issues. We try to present the hen with everything she might see during lay in that geographic area. That’s our goal.” Meagan Slater, DVM, said in Pennsylvania, where she worked before she joined Mountaire Farms, most broiler breeders were vaccinated with live, primer vaccines and then at least one killed vaccine. “In fact, most layers there actually received two killed vaccines before they were moved. A large percentage of companies do not boost throughout the life of the flocks, so they try to get the antibodies up front. So, for good or bad, that’s what they’re doing. It seems to be working and helping to protect against some shell-quality issues,” she said.

Kalen Cookson, DVM, director of clinical research, Zoetis, said in his experience a good, diverse live vaccination program in long-lived birds followed by a killed IBV vaccine works well.

“From what we’ve seen, if you have good primers up front and a good killed response, you have good immunity on board when birds are placed on the farm,” he said.

Cookson believes the live/killed vaccination strategy is beneficial for breeders when there are novel variants circulating. “IBV is more of an insidious disease in long-lived birds, just because they’re not under the intense stress that broilers are. It’s not always as obvious if you do have a novel bronchitis exposure, but it might be there so you’re at least hedging your bets and protecting yourself a little bit,” he said.

Editor’s note: This report was adapted from “Infectious Bronchitis: Evolving Strategies for an Evolving Virus,” highlights of a roundtable discussion sponsored by Zoetis. To download a free copy, click [here](#). □



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Seven Myths and Truths About Zearalenone in Poultry Production

January 2, 2021 in [Biomim.net](#) by Lorrán Baeumle Gabardo

Zearalenone (ZEN) is usually associated with reproductive disorders in poultry, but do you know about its other effects, or how common ZEN really is? From ZEN's prevalence in feed to its impact on broilers, laying hens and turkey poults, it's important to learn how much of what you know about zearalenone is fact and how much is just a myth. Poultry species are generally considered to be more resistant to ZEN than other species such as pigs. However, recent research has shown the potential hazard of this mycotoxin in poultry, not only in the reproductive tract but also in other systems and organs.

[Click here for full article](#) □

Diets containing high DON levels impair broiler performance

December 23, 2020 in [AllAboutFeed.com](#) by Dr. Regiane Santos

Among the mycotoxins affecting livestock production, the Fusarium mycotoxin deoxynivalenol (DON) appears to be one of the most important ones.

[Click here for full article](#) □

EW Nutrition: What Poultry Producers Should Know About Endotoxins

January 18, 2021 in [PoultryWorld.net](#) by Guillermo Gaona and Marisabel Caballero

In this second part of EW Nutrition's two-part series with Poultry World on endotoxin management for poultry, the article looks at the stress factors that can lead to an increase of circulating LPS, the consequences for poultry animals' welfare, health and productivity, and the animals' internal strategies to deal with the issue. Additionally, the article explores and suggests different interventions that can be used to manage this important risk.

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Newcastle Disease Stable in US but Poultry Industry Should Be on Lookout for Evolving Strains

July 13, 2020 in [PoultryHealthToday.com](#)

Newcastle disease (ND) might be stable across much of the US, but the poultry industry needs to be on guard for changes in the virus that may require adaptation of ND vaccines, Guillermo Zavala, DVM, PhD, founder of Avian Health International, warned in an interview with Poultry Health Today. "Viruses are starting to slowly change on us, little by little, possibly making it necessary in the future to start adapting vaccines to optimize the protection that they provide," he said.

[Click here for full article](#) □

Serotype, Presentation of IBH Differ in Large and Small Birds

December 18, 2020 in [PoultryHealthToday.com](#)

More than one serotype has been the cause of inclusion body hepatitis (IBH) in broilers, which has presented differently in large- and small-bird complexes, Suzanne Dougherty, DVM, of Pilgrim's, told Poultry Health Today.

[Click here for full article](#) □

Latest Aviagen Briefs on Coccidiosis Control in Broiler Breeders and Broilers

December 18, 2020 in [ThePoultrySite.com](#) by Aviagen

Aviagen has just released two Briefs entitled "Coccidiosis Control in Broiler Breeders with the use of Vaccines" and "Coccidiosis Control in Broilers with the use of Vaccines". These documents were written by Jose J. Bruzual, senior poultry veterinarian, and Zoltan Marton, regional technical Veterinarian with the Global Veterinary Team. They provide production managers with a solid understanding of the process required for chicks to develop uniform immunity to coccidia through the use of Coccidiosis vaccines.

[Click here for full article](#) □

Dietary phytase reduces broiler woody breast severity

December 7, 2020 in [PoultryWorld.net](#) by Reagan Cauble, Elizabeth Greene, Sara Orlowski, Carrie Walk, Mike Bedford, Jason Apple, Michael T. Kidd, and Sami Dridi

The inclusion of phytase enzymes in the feed can have a positive effect on wooden breast development.

Potential modulation of breast muscle fatty acid profiles reduces the severity of the myopathy which often leads to meat condemnation. In 2014, the first publications appeared which described 'woody breast', a condition of broiler breast muscle characterized by visually hard, outwardly bulging and pale areas on the ventral surface of the pectoralis major muscle. Woody breast is now one of the most important myopathies challenging the poultry industry. It is of global concern, with incidences reported to affect 30-50% of broilers growing for 8 weeks to a live body weight of over 4.2kg. The myopathy constitutes a major animal health, welfare and economic concern causing enormous financial losses to the industry due to on-farm culling and mortality, downgrading, and condemnation at processing, as well as rejection from human consumption.

Preventing hypoxia

The etiology of the myopathy is still unknown, however, histological evidence of the hemorrhagic lesions indicates multifocal degeneration and necrosis of muscle tissue with infiltration of inflammatory cells, connective tissues and fat. Evidence is provided in the literature that woody breast myopathy is associated with systemic and local breast muscle hypoxia. Dietary supplementation with phytase reduced its severity. Dietary phytase enzyme is accepted in practice for the intestinal degradation of plant phytate and improvement of phosphorus digestibility and feed efficiency, but has also been shown to modulate oxygen-homeostasis-related pathways. Hypoxic conditions have been reported to limit the regenerative capacity of muscle fibers by favoring the replacement of degenerated muscle fibers with lipid and fibrotic tissues.

High doses of phytase

It has been suggested that woody breast is associated with lipid dysmetabolism, The present study was undertaken to determine the effect of dietary phytase on woody breast and breast muscle fatty acid profiles. The experiments involved male broilers subjected to 6 treatments, including 3 levels of dietary phytase supplementation (500, 1000, 2000 FTU).

Woody breast and white striping scores were recorded, and fatty acid profiles were determined using gas liquid chromatography. The fatty acid profile in the breast tissue of woody breast-affected birds had a significantly higher percentage of saturated fatty acids and a lower content of polyunsaturated fatty acids. Dietary phytase in high doses (1000 and 2000 FTU) significantly reduced the percentage of saturated fatty acids and increased that of polyunsaturated fatty acids compared with the control group. As woody breast myopathy seems to be associated with an imbalance of the fatty acid profiles, the supplementation of dietary phytase ameliorates its severity through modulation of saturated fatty acids and polysaturated fatty acid content. □

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Ascites Syndrome in Broilers: A Primer

January 7, 2021 in WattAgNet.com by Elizabeth Doughman

Ascites syndrome is best characterized by the accumulation of fluid in the body cavity of poultry. It represents a spectrum of physiological and metabolic changes including pulmonary hypertension that can lead to heart failure, increased blood pressure in the veins and excessive build-up of fluid in the liver that leaks into the body cavity. The non-infectious condition occurs in broiler chickens, turkeys, guinea fowls and ducks, but is most common in male broiler chickens.

[Click here for full article](#) □

Don't Let Immunosuppressive Diseases Compromise Broiler Performance

February 2, 2021 in PoultryHealthToday.com

Immunosuppressive diseases such as IBDV, Marek's and reovirus can compromise a bird's ability to fight off secondary infections. Keeping them in check becomes even more critical as poultry companies reduce or eliminate antibiotics. Poultry Health Today talked with disease experts about the importance of managing immunosuppression in broiler flocks.

[Click here for full article](#) □

Experts examine reasons for different Salmonella results

February 17, 2021 in FoodSafetyNews.us by Joe Whitworth

Wageningen University scientists have looked at why there are discrepancies in Salmonella results between poultry farmers' and authorities' tests. Experts analyzed factors associated with the difference between positive tests from routine initial Salmonella monitoring by poultry farmers and negative results of a retest by the Netherlands Food and Consumer Product Safety Authority (NVWA). Retests are based on suspicions of a false positive result from routine monitoring.

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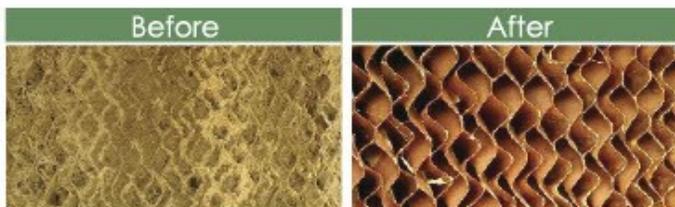
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Researchers discover how harmless E. coli turns pathogenic

February 16, 2021 in FoodSafetyNews.com

Scientists have determined how harmless E. coli gut bacteria in chickens can pick up the genes required to evolve and cause infections in poultry and people. Colibacillosis caused by avian pathogenic E. coli (APEC) is the most common infection in chickens reared for meat or eggs. It is fatal in up to 20 percent of cases and causes multi-million pound losses in the poultry industry.

[Click here for full article](#) □

New antibiotic alternative on Russian poultry farms

February 22, 2021 in PoultryWorld.net by Vladislav Vorotnikov

By 2025, Russian poultry farms could stop the use of feed antibiotics by including betulin in feed rations. The phytobiotic, derived from the bark of birch trees, is widely known for giving the tree its white color, which appears to protect the tree from mid-winter overheating by the sun.

[Click here for full article](#) □

Risk of Human Spread of H5N8 Bird Flu Deemed Low - WHO

February 26, 2021 in Reuters.com by Stephanie Nebehay

The risk of human-to-human spread of the H5N8 strain of bird flu appears low after it was identified for the first time worldwide in farm workers in Russia, the World Health Organization (WHO) said.

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“I’m going to the beach... I don’t know what he’s doing!”

TPA Board Member Dale McLerran and his wife Kim reside out in the country near Moss, TN in Clay County where they have Cobb breeder houses, cattle and hay. Dale and Kim are two of the best people possible as they are always smiling, always working together and always caring about others and their community.

Married in 1988, Dale subsequently graduated from TN Tech University in 1989 with a business management degree and soon went to work for Walmart as an assistant manager trainee in Crossville and Carthage. Kim attended Vol State where she obtained an associate’s degree in business and later obtained her LPN nursing degree from TCAT in Livingston. In 1993 Dale went to work for Honest Abe Log Homes in Moss, TN, just down the road from where they now live, in a safety and workers comp claims position and later became their pallet mill manager. From 1994 to 2003 he worked in the medical and health services profession in positions ranging from purchasing for 8 or 9 rural health clinics and 22 home health agencies, to selling and servicing medical equipment.



In 1994, they moved to the family farm in Clay Co. that Kim’s grandfather started back in 1945. They soon began farming cattle, hay and tobacco, then got into growing vegetables for a few years (lots of green beans and sweet corn) to replace the tobacco. They built their home in 1995. In Sept. of 2011 they built two 600’ x 40’ Cobb GP breeder houses and then received their first flock of birds in Jan. of 2012. The egg handling system in each house has its own table in the egg room, and the houses have curtain side walls and Big Dutchman equipment throughout. The houses are on natural gas and there is an incinerator for mortality management. Cattle and hay still comprise about 20% of their farming enterprise and Dale and his father-in-law rolled about 900 bales of hay last year. They land apply all of their litter and follow UT’s nutrient management guidelines.

Nine flocks into the poultry business, Dale is quick to compliment all the folks at Cobb who have helped them really learn the business. Dale’s desire to continue learning is most admirable and he is quick to say that anyone who strives to be successful should do the same. He greatly values and advises all growers to have a great working relationship with their local Extension, NRCS and FSA offices and to stay on top of things. He believes anyone starting out today should learn all they can, if they don’t know something “Google” it and spend time on their primary breeder’s website studying manuals, staying inquisitive and caring to continue improving. Learning to better manage his drinker lines to better manage his litter and conserve water was a major milestone early on, but now dust is his biggest challenge

Dale is very involved with NRCS and Extension programs in his county and he invaluable assists the TPA office greatly in overseeing and advising programs for all growers in the state regarding the various cost-sharing and conservation opportunities. Dale was the first to complete and recommend UT’s nutrient management guidelines worksheet for growers that fulfills responsibilities in keeping with the clean water act as it satisfies the NMP requirement without having to pay a consultant to do an expensive plan. He is currently serving in his third term on the Clay Co. Soil Conservation District (SCD) board and has moved up from VP to Chair. His main responsibilities on the board include prioritizing programs and approving funding conservation programs and Dale personally signs every contract and check for his SCD. He is currently completing UT’s Master Farm Manager program online to be eligible for up to 50% reimbursement for equipment approved through TN’s Ag Enhancement Program, and he has been very instrumental in getting items for growers added to the approval list.



Kim and Dale have two daughters and one grandson. Their oldest daughter Jessica, and her husband Cody Stafford have a son, Kasen Reid (don’t leave off the “Reid” part of his name or he’ll correct you!) who will be 4 in July. Kasen Reid loves being on the farm with his grandpa and being on the tractors. Their youngest daughter, Baleigh, is an LPN and currently works nights. These two young ladies clearly have Dale and Kim’s passion for life, family, and the farm – and work ethic, as they admirably desire to preserve and continue the farming operation into the next generation. As a sidebar conversation, TPA asked Dale what he thought of Bill Gates now being the largest owner of tillable farm land and his recent comments about beef cattle and synthetic meat and Dale said, “he just needs to stick with computers and leave the rest to us farmers”.



TPA visited with the McLerrans on Feb. 26th, a Friday, and their birds were going out that Sunday. In respect of company protocol and biosecurity, TPA did not visit or go near the houses but the McLerran’s outlined what would soon be taking place to clean the houses and start preparing for the next flock. The day after the birds leave they run their belts to clear any eggs, raise the nests, pull the pads, and then start taking out slats, washing things down and scraping walls. They have an automated nest pad washer that can handle 250 pads at a time. This takes about 45 minutes per load to wash, and about 2 ½ days to do all 9284 pads. Dale says this used to take a full week to do by hand and he advises everyone with breeders to heavily consider getting one. When the ice and snow storm hit a few weeks ago and some equipment wasn’t running exactly like it needed to and their help couldn’t get there, Dale told Kim he’d take house 1 and she’d take house 2 and they got after it. What a team, what commitment.

When asked, the McLerrans said that they haven’t been on a real vacation in about three years. Their more memorable vacations have included trips to Wyoming, Savannah, Gatlinburg & Pigeon Forge (to the “Rod Run”) and to various beaches. When asked where they’d like to go the next chance they get, Kim very quickly responded “I’m going to the beach, I don’t know what he’s doing!”

Dale is proud to serve on the TPA board representing the growers in TN. TPA appreciates his service and the entire McLerran family’s commitment to helping feed the world through the eggs they continue sending to the hatchery. □

How would \$15 minimum wage affect poultry sector?

January 27, 2021 in [WattAgNet.com](https://www.wattag.net) by Roy Graber

If a proposed change to the federal minimum wage to \$15 per hour becomes law in the United States, it may not have a huge impact on the payroll budgets for companies in the poultry industry, but it is likely to still have an economic effect on the industry.

[Click here for full article](#) □

New CBO Report: Federal \$15 Minimum Wage Could Cost 1.4 Million Jobs

Feb. 10, 2021 from [The Industry Update Newsletter](https://www.theindustryupdate.com)

A new [report](#) from the Congressional Budget Office (CBO) released this week reaffirmed what most economists already admit: a federal minimum wage hike will kill jobs. More specifically, the report estimates a \$15 minimum wage and the elimination of the tip credit will cost 1.4 million employment opportunities by 2025 (average estimate). See our op-ed in the Washington Times this week explaining the connection between mandatory wage hikes and increased automation.

[Click here for full article](#) □

Judge: Labels on plant-based meat ‘potentially misleading’

December 7, 2020 in [WattAgNet.com](https://www.wattag.net) by Elizabeth Doughman

An appeal to the ruling is already in the works.

A U.S. District Judge has ruled that the [labels and packaging of plant-based meat products](#) may contain misleading terminology designed to deceive the average consumer into thinking they are purchasing traditional meat.

"The court has no trouble finding that the speech at issue is potentially misleading," U.S. District Judge Stephen Friot wrote in the opinion. "Product packaging which labels a product as 'Classic Burger,' bacon, chorizo, hot dog, jerky, meatballs, or steak, when the product is actually a plant-based product, is potentially misleading to a reasonable consumer."

‘A violation of First Amendment rights’

Upton’s Naturals, a plant-based protein producer, and the [Plant Based Foods Association \(PBFA\)](#) filed a lawsuit against the state of [Oklahoma over a new meat labeling law](#) earlier this year, calling it a violation of their First Amendment rights.

"Our labels make it perfectly clear that our food is 100% vegan," Upton’s Naturals founder, Daniel Staackmann, said at the time. "But now our meat industry competitors in Oklahoma want to force us to redesign our labels as if our safe, healthy products are potentially harmful. It’s not the first time we’ve had to fight a state law created by our competitors, and we look forward again to defending our First Amendment right to clearly communicate with our customers."

The lawsuit was then escalated to the U.S. 10th Circuit Court of Appeals after an Oklahoma judge declined to put a hold on the law.

The law in question

The [Oklahoma Meat Consumer Protection Act](#), which took effect November 1, prohibits persons or companies from "advertising or selling food plans or carcasses from engaging in certain misleading or deceptive practices."

The bill outlines meat as, "Meat means any edible portion of livestock, poultry or captive cervid carcass or part thereof." Misrepresent is defined as, "the use of any untrue, misleading or deceptive oral or written statement, advertisement, label, display, picture, illustration or sample."

Other states have similar or proposed legislation, including Arkansas, Missouri, Washington, Montana, Wyoming, Colorado, Arizona, New Mexico, North Dakota, Nebraska, Mississippi, Tennessee, Indiana and Virginia.

Not over yet

Upton’s Naturals and PBFA have already announced plans to appeal the ruling.

"The Plant Based Foods Association will continue to fight to ensure its members, including Upton’s Naturals, can continue to fairly and accurately label their foods as the First Amendment clearly allows. The Institute for Justice has already noticed an appeal of the preliminary-injunction decision to the Tenth Circuit. We are confident that we have the facts, and the law, on our side," Michelle Simon, Founder of PBFA, said in an email. □

Lab-grown fat coming to a menu near you? (blog)

February 15, 2021 in [WattAgNet.com](https://www.wattag.net) by Mark Clements

Laboratory-grown fat is the product of choice for start-up company Hoxton Farms, which aims to bring to alternative fat to the alternative meat market.

[Click here for full article](#) □

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The Ag Watchdog Newsletter

January 11, 2021 - Mitsubishi to Sell Lab-Grown Beef

Mitsubishi has [partnered](#) with Israeli startup Aleph Farms to sell lab-grown beef in Japan. Aleph plans to begin distribution in Asia next year. Singapore is the only nation to date to approve cell-cultured meat.

January 23, 2021 - Cell-Cultured Seafood Startup Raises \$60 Million

BlueNalu has [raised \\$60 million](#) in debt financing that will allow it to have a production facility capable of making 500 pounds a week of cell-cultured fish. The company expects to have its cultured fish in restaurants in the US later this year. □

Alt-Meat Advocates Share Hopes For Biden Presidency

November 16, 2020 in PlanetFriendlyNews.com by Jessica Scott-Reid

With the election of Joe Biden as the next President of the United States, there is renewed hope that major issues regarding climate change and environmental protections will now receive the attention they desperately need.

[Click here for full article](#) □

Cultured meat: From science fiction to reality

February 11, 2021 in WattAgNet.com by Elizabeth Doughman

Cultured meat could be a bigger threat to animal proteins than plant-based alternatives, claimed Nick Lin-Hi, Professor of Economics and Ethics at the University of Vechta, Germany.

[Click here for full article](#) □

Podcast: The R&D behind plant-based foods

February 12, 2021 in MeatPoultry.com by Ryan McCarthy

Mike Leonard, CTO at Motif Food Works, breaks down what the ingredient company is doing for future plant-based foods.

[Click here for full article](#) □



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Is meat production more efficient in a lab?

January 12, 2021 in WattAgNet.com by Elizabeth Doughman

Lab-grown meat sounds like something out of science fiction, but advocates say the process is more efficient than traditional agriculture.

[Click here for full article](#) □

Future Meat Technologies lowers cost to produce cultured chicken breast to \$7.50

February 1, 2021 in MeatPoultry.com by Bob Sims

The company targets 18-month timeframe to market products.

[Click here for full article](#) □

Impossible Foods is cutting suggested retail prices by 20% for grocery stores throughout the United States

February 3, 2021 in FoodMarket.com

The price cuts bring the company's suggested retail prices for the Impossible Burger to \$6.99 for a 12-ounce package. Impossible Foods is introducing similar price cuts internationally at retail stores in Canada, Singapore, and Hong Kong. The latest price cut is now the third reduction in less than a year, and Impossible Foods wants grocers to pass the savings to consumers as soon as possible.

[Click here for full article](#) □

Lawsuit challenges FDA approval of additive that makes Impossible Burger 'bleed'

February 4, 2021 in FoodSafetyNews.com

The Center for Food Safety is challenging the FDA's approval of a color additive used to make Impossible Foods' plant-based burger appear to "bleed" like real meat. The advocacy group claims that the FDA's decision was not based on "convincing evidence" as required by regulation.

[Click here for full article](#) □

Novel approach lowers cost of cultured meat production

February 9, 2021 in WattAgNet.com by Elizabeth Doughman

Future Meat Technologies, an Israel-based startup, has developed an innovative approach that reduces the cost of lab-grown chicken breast production to less than \$10.

[Click here for full article](#) □

It's Not About Steak

February 12, 2021 in Drovers.com by Greg Henderson

The world's first 3-D bioprinted ribeye steak was unveiled this week. Just like plant-based products already in grocery stores, cultured meats will rely on misinformation about beef to overcome the "yuck" factor.

[Click here for full article](#) □

Fake Meat Company Partners with McDonald's and Yum Brands

February 27, 2021 in The Industry Update Newsletter

Fake meat producer Beyond Meat [announced](#) two separate deals with major restaurant chains this week. McDonald's is expanding a previous partnership around the "McPlant burger" and other new potential menu items with the company. And Yum Brands—which owns KFC, Taco Bell, and Pizza Hut—will be utilizing synthetic meat for pizza toppings, chicken alternatives, and possibly taco fillings.

[Click here for full article](#) □

KFC launches chicken free chicken burger

February 26, 2021 in PoultryWorld.net by Natalie Berkhout

KFC Malaysia has launched its Zero Chicken Burger, a plant-based and meatless burger that promises the flavor of Colonel's secret recipe of 11 herbs and spices, but which has no chicken.

[Click here for full article](#) □

Urner Barry Now Offering Plant Protein Market Coverage

March 1, 2021 in FoodMarket.com

Urner Barry, the leading provider of protein market news and information in the food industry, is pleased to announce new market coverage of the growing Plant Proteins sector on COMTELL.

[Click here for full article](#) □

Propane Update

Feb. 24, 2021 SPOT PRICING: Mont Belvieu Propane Spot Price on Feb. 22, 2021 was at a current level of \$0.945/gal., which is more than double what it was this time last year. The lowest price for the past twelve months occurred on March 23 at \$0.203 and the highest was \$0.978 on Feb. 17, 2021.

Allowing for an average of \$0.41 per gallon for tariffs, handling and delivery to most areas, **the average current retail price is roughly \$1.36/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_epllpf4_y44mb_dpgD.htm.

For an update on FMCSA emergency declarations and HOS waivers through May 31, 2021 go to <https://www.fmcsa.dot.gov/emergency-declarations>.

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 application deadline is March 31, 2021.

To learn more about the Propane Farm Incentive program that can provide up to \$5000 toward the purchase of new propane powered farm equipment click [here](#). □

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COVID-19 Update: USDA, FDA Underscore Current Epidemiologic and Scientific Information Indicating No Transmission of COVID-19 Through Food or Food Packaging

The following is attributed to Acting USDA Secretary Kevin Shea and Acting FDA Commissioner Janet Woodcock, M.D

WASHINGTON, Feb. 18, 2021 — After more than a year since the coronavirus disease 2019 (COVID-19) outbreak was declared a global health emergency, the U.S. Department of Agriculture, the U.S. Food and Drug Administration and the U.S. Centers for Disease Control and Prevention continue to underscore that there is no credible evidence of food or food packaging associated with or as a likely source of viral transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus causing COVID-19.

Our confidence in the safety of the U.S. food supply remains steadfast. Consumers should be reassured that we continue to believe, based on our understanding of currently available reliable scientific information, and supported by overwhelming international scientific consensus, that the foods they eat and food packaging they touch are highly unlikely to spread SARS-CoV-2.

It's particularly important to note that COVID-19 is a respiratory illness that is spread from person to person, unlike foodborne or gastrointestinal viruses, such as norovirus and hepatitis A that often make people ill through contaminated food. While there are relatively few reports of the virus being detected on food and packaging, most studies focus primarily on the detection of the virus' genetic fingerprint rather than evidence of transmission of virus resulting in human infection. Given that the number of virus particles that could be theoretically picked up by touching a surface would be very small and the amount needed for infection via oral inhalation would be very high, the chances of infection by touching the surface of food packaging or eating food is considered to be extremely low.

The USDA and the FDA are sharing this update based upon the best available information from scientific bodies across the globe, including a continued international consensus that the risk is exceedingly low for transmission of SARS-CoV-2 to humans via food and food packaging. For example, a recent opinion from the [International Commission on Microbiological Specifications for Foods \(ICMSF\)](#) (PDF, 352 KB), stated: "Despite the billions of meals and food packages handled since the beginning of the COVID-19 pandemic, to date there has not been any evidence that food, food packaging or food handling is a source or important transmission route for SARS-CoV-2 resulting in COVID-19." Additional [literature reviews](#) and [analyses](#) from other countries agree.

In addition, considering the more than 100 million cases of COVID-19, we have not seen epidemiological evidence of food or food packaging as the source of SARS-CoV-2 transmission to humans. Furthermore, transmission has not been attributed to food products or packaging through national and international surveillance systems. Food business operations continue to produce a steady supply of safe food following current Good Manufacturing Practices and preventive controls, focusing on good hygiene practices and keeping workers safe.

Based on the scientific information that continues to be made available over the course of the pandemic, the USDA and FDA continue to be confident in the safety of the food available to American consumers and exported to international customers.

Additional Information:

- ◆ [FDA: Food Safety and COVID-19](#)
- ◆ [Coronavirus \(COVID-19\) Update: Joint Statement from USDA and FDA on Food Export Restrictions Pertaining to COVID-19](#)
- ◆ USDA: www.usda.gov/coronavirus □

Meat and Poultry Worker COVID-19 Case Rates Five Times Lower in December than May

January 14, 2021 in [FoodMarket.com](#)

Headlining our news today, [new analysis of independent data for 2020 shows that reported new COVID-19 infection rates amongst meat and poultry workers were five times lower in December than in May](#). Meanwhile, rates in the general population rocketed up nine times in the same period. The Food and Environment Reporting Network reported that the meat and poultry sector had an average of 19.91 new reported cases per 100,000 workers per day in December, compared to 98.39 on average per 100,000 workers per day in May.

[Click here for full article](#) □

Seed Funding for Wearable Sensors

February 18, 2020 from [InterateLabs.co](#)

Iterate Labs, an Industry 4.0 platform that maximizes workforce productivity, operations and safety through AI, digitized human motion and sensor inputs, announces that they have raised their \$1 million seed round of funding led by Monozukuri Ventures, who are co-investors with Tyson Ventures, the venture capital arm of Tyson Foods, Entrepreneurs Roundtable Accelerator (ERA) and Ray Muzyka among others. Iterate Labs uses wearable sensors and computer vision to connect manufacturing workforce movement and actions to improve worker safety and performance.

[Click here for full article](#) □

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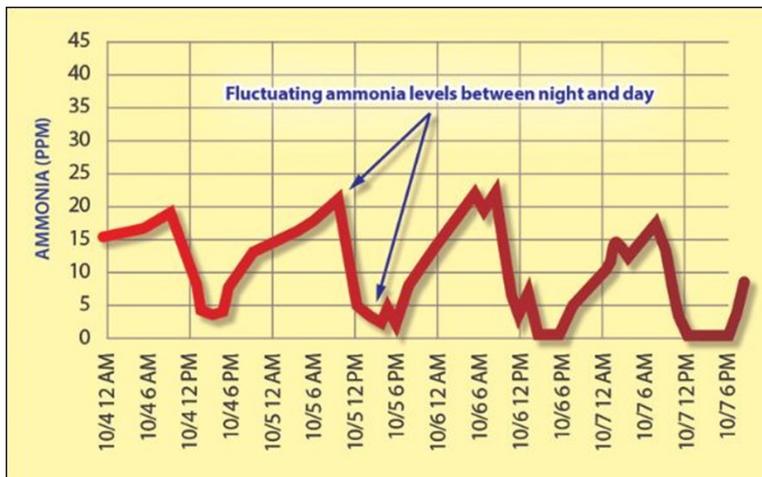
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Balancing Temperature, Relative Humidity and Ammonia During Transitional Weather

October 29, 2020 at JonesHamiltonAq.com



[Click here for full article](#) □

During autumn and spring, it's not uncommon for **outside temperatures to swing 20°F or more**. While cool nights and warm days can be a reprieve from the hot days of summer for us, the drastic change in temperature tends to make **ventilation settings** more of a challenge in poultry houses.

Ventilation rates tend to be higher during the warm parts of the day and lower as temperatures cool at night. The fluctuation in ventilation settings can adversely affect relative humidity (RH) and ammonia levels inside the house, causing levels to be higher at night when ventilation rates tend to be lower.

Given the impact environmental conditions can have on bird performance, it's vital that producers understand the variations between daytime and nighttime temperatures, and how to adjust house management to halt the potentially detrimental effects.

Consuming more poultry lowers risk of death from dementia, cardiovascular and other diseases: New study

Older women who eat poultry face lower risks of cardiovascular disease (CVD), all-cause mortality and dementia-related mortality, according to [new findings](#) published in the *Journal of the American Heart Association*.

[Click here for full study results](#) □

University of Oklahoma to Conduct Air Quality Study Near Large-Scale Poultry Farms

December 3, 2020 in ReadFrontier.org by Clifton Adcock

The University of Oklahoma's Hudson College of Public Health plans to study the effects of large-scale poultry operations' impact on air quality for those living near the commercial farms, which can hold tens of thousands of birds in a single chicken house. The study, headed by professors Jooyeon Hwang and Margaret Phillips, who chairs the college's department of occupational and environmental health, will monitor air quality inside and outside the houses of those who live within 3,000 feet of large-scale chicken farms in eastern Oklahoma.

[Click here for full article](#) □

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COMMODITY REPORT

February 19, 2021 in Chick-News.com

- ◆ The financial and economic policies of the Biden-Harris Administration are emerging with a focus on the vaccination campaign to reduce the impact of the COVID-19 pandemic in order to restore the economy. The commodity market this past week was little changed continuing the trend last week and following the sharp upturn two weeks ago despite export orders and lower ending stocks as forecast in the February 9th WASDE Report and subsequent planting intentions.
- ◆ S producers are now receiving and conversely livestock producers in the Midwest are paying close to \$5.50 per bushel for corn and \$13.80 per bushel for soybeans plus transport and basis.
- ◆ Corn and soybeans were respectively 0.7 percent and 0.4 percent higher than the previous week although still at notably high levels. Soybean meal lost 0.5 percent.
- ◆ According to the USDA FAS Export Report for the week ending February 11th 2021 reflecting market year 2020-2021, cumulative placed export orders for corn amounted to 35.58 million metric tons (1,402 million bushels) with 22.97 million metric tons (905 million bushels) actually shipped. During the past week 1.00 million metric tons (39 million bushels) of corn were ordered by China and other nations, sharply down from the previous week, with 1.38 million tons (54 million bushels) shipped.
- ◆ Cumulative export orders for soybeans for the 2020-2021 market year attained 9.18 million metric tons (336 million bushels) with 50.68 million metric tons (1,860 million bushels) actually shipped. This past week some previously placed orders from China were cancelled. Weekly sales of soybeans attained 0.46 million metric tons (16.7 million bushels) with 1.00 million metric tons (36.7 million bushels) shipped metric tons shipped.

The following quotations for delivery in the months as indicated were posted by the CME at 15H00 on February 19th 2021 compared with values posted at 14H00 on February 12th 2021 (in parentheses) reflecting specified months in 2021 for delivery.

COMMODITY

Corn (cents per bushel)	March 543 (539)	May 542 (547)
Soybeans (cents per bushel)	March 1,377 (1,371)	May 1,380 (1,370)
Soybean meal (\$ per ton)	March 424 (426)	May 424 (426)

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

COMMODITY CHANGE FROM PAST WEEK

Corn:	March quotation up 4 cents per bushel	(+0.7 percent)
Soybeans:	March quotation up 6 cents per bushel	(+0.4 percent)
Soybean Meal:	March quotation down \$2 per ton	(-0.5 percent)

For each 10 cent per bushel change in corn the cost of egg production would change by 0.45 cent per dozen and the cost of broiler production would change by 0.25 cent per pound live weight

For each \$10 per ton change in the price of soybean meal the cost of egg production would change by 0.44 cent per dozen and the cost of broiler production would change by 0.25 cent per pound live weight

This week the small changes in the prices of corn and soybean meal would increase nest-run production cost for eggs by 0.3 cent per dozen and for broilers 0.1 cent per live pound. Over the past eight weeks escalations in the price of major ingredients have added 7.8 cents per dozen and 4.4 cents per live-weight lb.

According to the February 9th WASDE, corn harvested in calendar 2021 will attain 14,183 million bushels with ending stocks projected at 1,502 million bushels, down 3.2 percent from the January Report. Values will be updated reflecting ongoing export volumes, domestic use and the March WASDE, incorporating recent planting intentions. Compared with February 12th at 14H00, the CME quotation at 14H00 for corn on February 19th was up 4 cents per bushel for March delivery to 543 cents.

The social restrictions imposed in the U.S. as a result of COVID-19 will reduce ethanol demand by 1.5 billion gallons or 10 percent of projected 2020-2021 requirement accepting a nominal ten percent addition to gasoline. A significant proportion of the U.S. ethanol fermentation capacity is off-line or operating at lower than capacity at present and the outlook for increased demand is questionable with ten percent exported. According to the U.S. Energy Information Agency the industry produced on average 911,080 barrels per day for the week ending February 11th 2021. Ethanol stocks stood at 24.3 million barrels on February 12th 2021 up 2.1 percent from the previous week. Ethanol was priced at \$1.69 per gallon on February 19th unchanged from February 12th and compared with a five-year low of \$0.92 per gallon on March 26th 2020. Concurrently RBOB gasoline at \$1.81 per gallon (quoted, New York Harbor) was up 16 cents per gallon from the previous week (presumably due to weather conditions) and is now 12 cents per gallon higher than ethanol but with a 63 percent higher BTU rating. *(continued on next page)*

COMMODITY REPORT *(continued from previous page)*

With more plants among the 201 on January 1st 2021, DDGS is freely available commanded a higher price than in the fourth quarter of 2020. Eastern Corn-belt product was priced at \$242 per ton on February 16th 2021, \$1 per ton lower than the previous week and \$86 per ton more expensive than on February 11th 2020.

Soybeans are the beneficiary of demand by China. The CME price at 14H00 on February 19th rose 6 cents per bushel over the week to 1,377 cents per bushel for current month delivery. The USDA documented a 2021 crop of 4,135 million bushels. Ending stocks according to the February 9th 2021 WASDE projection will attain 120 million bushels, down from the January 2021 projection of 140 million bushels representing a seven-year low.

For consecutive calendar years 2017 through 2019 the U.S. supplied 34.4 percent of soybean requirements for China amounting to 95.5 million metric tons. This was followed by a decline to 16.9 percent of 88.5 million metric tons in 2018 and 16.6 percent of 88.0 million metric tons in 2019. The USDA anticipates that soybean imports by China will amount to 95 million metric tons during the 2020-2021 market year.

For the 2019/2020 market year China imported 2.1 million metric tons of corn from the U.S., 4.8 percent of total exports of 43.3 million tons, but 12 percent less than in the 2018/2019 market year. The U.S. Grains Council documented sales of U.S. corn to China through December 31st 2020 during the 2020/2021 year amounting to 11.7 million metric tons (460 million bushels) with 65 percent yet to be shipped.

For the 2019/2020 market year China imported 16.3 million metric tons of soybeans from the U.S., 36.2 percent of total exports of 44.9 million metric tons, but 3.9 percent less than in the 2018/2019 market year. □

Poultry House Electrical Checklist

Jess Campbell, Jeremiah Davis, and Kelly Griggs – National Poultry Technology Center

Human safety, flock safety and fire prevention are three major reasons why it is important to conduct a yearly electrical inspection on every farm. We suggest hiring a professional to do some of these inspections and repair work. Now might be a good time to contact your local electrician and schedule an inspection. Hot weather is just around the corner! Here are some items below that will help you get pointed in the right direction. **NOTICE: All electrical work must be done with circuits OFF and backup systems OFF!** Hire a professional as needed. Safety First!

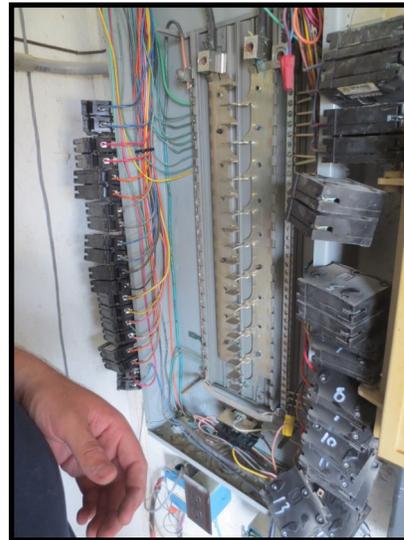


Photo 1: Pipe clamps commonly used as a ground clamp are often found loose during inspections. Acorn type clamps (bottom clamp) tend to maintain a stronger bond and a more reliable ground connection.

Photo 2: A photo of a professional electrician inspecting and cleaning breakers and the connections in a main electrical panel. Notice that they are numbered to keep them in order.

◆ Ground Rod Connections

- ⇒ Check that the grounding rod clamp is tight (we recommend acorn style clamps).
- ⇒ If Ufer ground (concrete encased electrode) is installed, the wire to rebar clamp is tight and rebar is not corroded.
- ⇒ Check that the ground wire connection to panel is tight.

(continued on next page)

Poultry House Electrical Checklist *(continued from previous page)*

◆ Main Electrical Panel

- ⇒ Check that all main lugs on supply wires are tight.
- ⇒ All breaker connections must be tight and show no signs of overheating.
- ⇒ The panel is clean from debris and spider webs.
- ⇒ No open holes are left in the box for rodents or insects to enter.
- ⇒ No signs of electrical overheating or short circuits or potential for short circuits visible.



Photo 3: If you look closely at the picture on the left you might see that the blue wire has shorted to the metal junction box. This took hours to find! This installer put too many wires inside this conduit and eventually caused this short.

Photo 4: Thin plastic boxes used for lighting sockets may fail over time due to the expansion and contraction of the PVC conduit in the house. This is difficult to repair.

◆ Junction Boxes

- ⇒ All junction box connections are terminated with clean connections, show no signs of loose connections and no signs of moisture or dust buildup are present.
- ⇒ The box has a protective cover and wires have strain-relief connectors on them to keep them from pulling out of the box if stressed or pulled.

◆ Lighting Boxes and Keyless Sockets

- ⇒ Plastic boxes are not damaged or broken.
- ⇒ Excessive dust and moisture is not present in box or on inside surface of socket.
- ⇒ No signs of loose connections.
- ⇒ If light bulb flickers and the bulb is replaced and the next bulb flickers, replace keyless.

◆ Motor Connections

- ⇒ All motor connections have stress relief connections installed.
- ⇒ Supply wires are protected from stress and insulation is not compromised.
- ⇒ The motor casing is grounded, the connection is tight, clean, and bonded properly.
- ⇒ Wires that have cracked insulation, worn spots, or damaged from rubbing against steel cable, rope or any pulleys are replaced and corrected to prevent any future damage.



Photo 5: This grower allowed an inexperienced helper to install a new fan circuit and as a result nearly burned the building down. Thankfully, we noticed the flame and had access to a fire extinguisher.

Photo 6: Not the best repair work we have seen but the fan works now.

(continued on next page)

Poultry House Electrical Checklist *(continued from previous page)*

◆ Romex Connections

⇒ Romex wires must be inspected for short circuit damage, rodent damage and all connections should be protected inside a junction box of some type.

◆ Cord Runs and Connections

⇒ Many poultry houses have runs of flexible power cables running throughout the house and are adjacent to moving cables. Care must be taken to protect these wires from being damaged by steel cable, pulleys, and other moving parts.

◆ Convenience Outlets and Equipment Outlets

⇒ The days of allowing open electrical boxes are long over. A lot of water and dust move through a modern poultry house and a grower must do everything reasonably possible to protect the electrical system from moisture, dirt, and damage. It only takes one short circuit to start a fire and one loose connection to electrocute a worker or yourself.

◆ Main House Disconnect

⇒ Some houses have an electrical disconnect that may be a simple knife switch, fused connection, or breaker inside. These connections and wires must be inspected to make sure all connections are clean, tight and the switch is in good working order. Neutral and ground bars and connections must be landed in the proper place and be bonded tightly.

◆ Generator Shed and Main Electrical Entrance Components – Please hire a professional to service backup generators, transfer switches, main disconnects and house disconnects.

⇒ Have spare parts on hand and a serious backup plan and practice it often.

⇒ Document all services and repairs that have been made to this equipment.



Photo 7: *This generator battery is in serious need of cleaning and testing. Can you identify the problem?*

Photo 8: *Each house disconnect will have a breaker or fuse to protect the wires and equipment on the load side. These fuses must be inspected and cleaned. Can you identify the problem?*

Bottom line: Any type of electrical failure can pose a threat to a poultry farmer and his/her livelihood. Springtime preparation may help prevent real problems down the road. Whether the farm is new or old, we find problems are sometimes hidden and unexpected until reality hits.

Example: Grower A spends \$1,500 on an electrical inspection that includes several repairs to some major electrical components on a farm and has no electrical issues in 2021. Grower B had a run of bad luck this year due to a blown disconnect fuse going to one house. He does not have spare fuses on the farm. He does get an alarm but loses the entire house of birds at near market age. He loses 19,000 birds at 9 pounds on average with a yield of \$0.06/lb. = \$10,260 in lost income alone. Do not be like Grower B.

Good luck from the National Poultry Technology Center! For more information download our Poultry Toolkit smartphone app, visit our website www.poultryhouse.com or contact any of our team members.

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The [EU] Green Deal: Potential impact on the feed industry *(continued from page 14)*

In terms of how FEFAC members could increase use of local ingredients and ‘sustainable’ alternative proteins, Döring says they recognise the potential to increase production and competitiveness of homegrown oilseeds and protein crops. He adds that [insect](#) meals, processed animal protein (PAP) from poultry and pigs, marine ingredients, yeast, [algae](#) and so on “can all make a valuable contribution to further reduce the EU’s reliance on imported Hi-Pro vegetable protein (protein sources containing 30-50% protein).” However, FEFAC urges realistic targets and the addressing of trade-offs between competing targets. Döring adds that market access to imported vegetable proteins will remain crucial.

On the subject of 25% organic food production in the EU by 2030, Döring says this is understood to be an aspirational target. He adds that this target would be easier to obtain in sectors like aquaculture, dairy and table egg production, but “there are much more economic constraints in sectors like broiler and pig production.”

FEFAC is also “pleading” for a ‘One Nutrition’ programme at EU level, which integrates cutting-edge nutritional science on plant, animal and human nutrition “in order to stimulate a holistic approach to define specific sectoral sustainability indicators to improve nutrient efficiency along the whole agricultural and food production chain.”

The role of insect ingredients

There is a large role for insect production to play in helping the EU feed sector align with the sustainability parameters of the Deal.

One way that insect production is sustainable is in the food the [insects](#) themselves consume. [Insects](#) in the EU are currently fed a mix of by- and co-products from the agri-food industries, reports Constantin Muraru, communications manager at the International Platform of Insects for Food and Feed (IPIFF), which represents the interests of the insect production sector. They are also fed resources which are not currently destined for human consumption (the so-called ‘former foodstuff’).

“The above mentioned by-/co-products may also include those derived from grains, starch, fruit and vegetable supply chains (e.g. bran, distillers grains, unsold fruit and vegetables, including peels) as well as products arising from the food manufacturing process (other than final products),” explains Muraru. “Among the most frequently used former foodstuffs used in insect farming, we can highlight unused outputs from local food producers, such as bakery products, or products from supermarkets which are unsold due to technical or logistical reasons.”

Going forward, IPIFF hopes this will increase, with its members committed to making “a bolder contribution” to EU’s target of halving food waste by 2030. “To this end, one of the primary objectives is to facilitate food waste avoidance – by redirecting products intended for human consumption (which would not have other use and would otherwise be discarded) – to insect farms,” says Muraru. “From a regulatory point of view, one necessary step is the authorisation of former foodstuffs containing meat and fish. On this subject, IPIFF is collaborating with the European Commission in order to diversify the list of permitted substrates for insect farming activities.”

In terms of how much the use of insect protein in feed will expand, we must look at where things are currently situated. Presently, insect PAP can only be used in aquaculture feed and pet food., but IPIFF hopes regulatory changes made in 2017 by the European Commission (EC) will soon bring regulatory clarity, encouraging investment into the insect sector and promoting upscaling.

However, although insect farms are being “presently being built all across the continent,” Mararu says “it would take a couple of years until they will reach their maximum production capacity – delivering high-quality feed ingredients for the aquaculture sector – but also for the poultry and pig feed markets. Future legislative developments (e.g. authorisation of new substrates such as former foodstuffs containing meat and fish, development of organic standards for insect farming) would considerably contribute to increasing demand for insects and their derived products.”

Insect protein production is also of course sustainable not only because it’s efficient and uses food industry [by-products](#) but because it’s local – and has significant potential to displace some imports.

IPIFF points out that in the ‘EU+UK Protein Balance sheet’ published by the EC in June 2020, 78% of protein in EU animal feed originates in the EU, but only 26% of Hi-Pro feed ingredients originate there. IPIFF believes that in line with the growing demand for EU-produced feed, insect production may increase EU-based production of Hi-Pro and Super-Pro (>50% protein content) sources.

The big picture

On the whole, FEFAC consider the Green Deal objectives “as stimulus-providing opportunities to the feed sector to reposition animal nutrition solutions as a key vector to drive innovation to support the sustainable development of livestock systems,” says Döring.

“FEFAC together with its sister organizations in the US, Brazil and other world regions have invested heavily in new environmental impact assessments tools (PEFCR Feed) for which the methodology was developed and assessed by FAO and the EU and Global Feed LCA databases (GFLI).”

This will allow the EU feed industry, livestock farmers, the supply chain and other partners “to demonstrate that effective, science-based feed systems can make a significant contribution to reduce environmental burdens of feed and livestock production.”

However, Döring adds that FEFAC advocates “a balanced approach, inviting the EU Commission to tackle in-built dilemmas and trade-offs between competing Green Deal objectives by developing more meaningful sector indicators...This approach would reflect the ‘DNA’ of the EU and global feed industry, as resource efficiency champions of the food chain, through the conversion of co-products and non-human edible feedstuffs into hi-value animal protein sources.” □

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