

TPA NEWSLETTER

...from the Tennessee Poultry Association

COMING SOON

Annual Meeting & Summer Getaway
August 5~6, 2016
DoubleTree Nashville Downtown



Register online at www.tnpoultry.org
Registration Deadline: July 11, 2016

Special Guest Speakers

Jerry Moye, President ~ Cobb~Vantress TN Governor Bill Haslam (pending) Hal Runkel, Founder ~ ScreamFree



AUCTION ITEMS TO DATE INCLUDE:



2 tickets to the Master's practice round on Monday courtesy of American Proteins

Turkey Hunt at Williams Creek Lodge provided by Joe Williams

Custom-made smoker by EIS donated by The Vincit Group

Apple Watch Sport 42 mm from Bart Smith, Sunbelt Rentals

Grand Ole Opry Package provided by Darling Ingredients

Items for both the Friday night silent auction and the Saturday night live auction are now being accepted. Please contact a TPA board member or the TPA office today!

Welcome New Allied Members

Si Safe Systems* LLC Simply Sustainable Advance Effective.

BioSafe Systems
Michael Applewhite
256-677-2802
Russell Owings
540-256-8426



ChemStation Mid-South
Roy Brown
901-345-5333



<u>Cox Shavings, Inc.</u>
Barry Cox
270-789-9611 ext 1471



InsulMasters Corp Bobby Hill 865~591-5313



Interstate Container
Russ Williams
678-283-4928
Jeff Cormier
443-523-4925



Leipers Fork Land & Home

Leipers Fork Land & Home Mike Foy 931-981-5035



Smith Creek, Inc. Jeff Roll 812-431-1579

















TPA Spring Scholarship Fundraiser

The Spring Scholarship Fundraiser was held on Thursday, April 21 with a sporting clays shoot at the Nashville Gun Club followed by the golf tournament at The Hermitage. We raised approximately \$15,000 for scholarships for TN students. Thank you to all of our very generous sponsors, donors and participants. Congratulations to our winners!!

Golf 1st flight

1st - International Paper: Russ Bratton, Ron Stafford, Andrew Blair, Hayden Blair

2nd - Tyson Shelbyville: Thad Smith, Roger Wood, Pete Collins

Golf 2nd flight

1st - ChemStation: Roy Brown, Bill Goold, Ryan McFadden, Chris Brown

2nd - River Valley AgCredit: Eric Smith, David Tallent, Gary Keith, Kyle Yancey

Closest to the Pin - Doug Nofsinger (#3), Bill Goold (#7), Bill Goold (#15)

Longest Drive - Gary Sadler (#13)

Sporting Clays

1st place team - Tyson OBC: Keith Riley, Shane Joyner, Rob Brown, Allen Lyle 2nd place team - Big Dutchman: Jeff Ratledge, Adam Hayes, Joe Williams, Derrick Tice Individuals - Shane Joyner (1st), Jeff Ratledge (2nd), Marla Beason (3rd), Andy Todd (4th), Adam Hayes & Mark Turner (tied for 5th)

THANK YOU Tennessee **To Our Sponsors** Diamond International Paper Merial **Platinum** American Proteins Cobb-Vantress Cumberland Live Oak Bank Marel Stork Poultry Processing Tyson Foods - Shelbyville Keystone Foods Tyson Foods - Obion Co. Silver Aviagen Farm Credit Mid-America Hubbard Liphatech Jones-Hamilton Silver Bullet Water Treatmen

INSIDE THIS ISSUE

Page 4: TTU Broiler House Project

Page 11: Slaughter Report & Crop Prices

Page 17: Propane Heater Incentive

Page 19: Comparing LED Lamps

Page 20: Selecting LED bulbs, dimmer combinations

Page 22: Dates to Remember

Page 28: Water pressure & broiler performance

Page 29: Solar for the Modern Poultry Farm

Page 34: TPA Summer Getaway Registration Form

Page 35: TPA Youth Art Contest

Page 37: TPA Allied Members

Page 38: News Around the Complexes



Congratulations to Harris Murray from Dyersburg FFA for receiving the State Poultry Proficiency award at the FFA Convention in Gatlinburg, TN on March 22nd. Making the awards presentation on behalf of TPA are Board Members (I to r), **David Wilds** with **Koch Foods** in

Morristown, and **David Tallent** with **River Valley AgCredit**, who is also a grower for **Hubbard**, **LLC**. This award was co-sponsored by Lubing USA.

More Than Your Equipment Supplier.

Our extensive network of dealers provides the service and expertise you need in a business partner and a full-line of feed storage and delivery systems, feeders, ventilation and environmental controls to maximize the growth potential of every bird.



Cumberland is on your team, improving the airflow and efficiency of your houses with solutions like the Mega Flow Butterfly Fan. Get powerful ventilation from our highest performing fan and an innovative shutter design for a complete seal. For more information visit us online at www.cumberlandpoultry.com

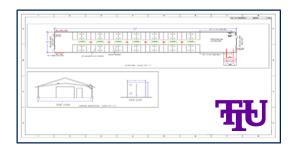
Your Ventilation Team.



Proven & Dependable™

INDUSTRY OPPORTUNITY

TTU has a vision for the poultry industry and needs everyone's help to make it happen!







Tennessee Tech University, in Cookeville, TN greatly recognizes the opportunities within the poultry industry for their students and for the industry. TTU has been taking students to the IPPE and TPA career fairs for the past few years and has been successfully placing students into some really great internship and career opportunities. Additionally, Tech has hired a poultry specialist to teach and mentor these students, and to conduct research of value to the industry. To best do all this in a manner most beneficial for the poultry industry, TPA has committed the industry to assist in building a 30' x 200' broiler research house at TTU to provide invaluable hands-on experience for their students and to conduct floor pen trials. If your company has not already committed to doing so, TTU needs your assistance to make this happen.

The following companies have graciously committed to providing materials, services and funding as follows:

- Smith Poultry Inc., Blountsville, AL, has agreed to construct the house and do all of the equipment installation.
- ♦ Cumberland Poultry, a division of The GSI Group, Assumption, Illinois, is donating feeding, watering and ventilation equipment, which includes their new $Edge^{TM}$ controller and *RollSeal* doors.
- ◆ Tyson Foods, Inc. has awarded a \$20,000 grant to be applied toward the equipment and related installations for this project.
- ♦ H&H Metals, in Charleston, IN will be providing all of the metal to roof and side this house.
- Cobb-Vantress, Inc. has committed \$4500 for diesel fuel for doing the pad & road work.
- InsulMasters, out of Knoxville & Nashville has agreed to provide their insulation installation services and is working on securing the insulation for this project.
- Rodriguez Builders, Inc. in Fulton, KY has worked up and provided a very detailed materials list for everything needed, and is donating the knee braces.
- Advanced Feeding Systems (AFS), out of Livermore, KY is providing the chicken wire and materials to set up the research pens inside the broiler house.
- CAM Electric in Union City is kindly working up the materials list for the electrical needs and Campbell Lighting of Pearcy, AR is designing and donating the lights and fixtures.

What else is needed?

- ⇒ **Materials,** such as rafters, lumber, hardware, electrical supplies, gravel, culverts, utility hookups and everything else on the materials list that has not already been committed is needed.
- ⇒ An **excavating contractor**, someone to provide their services to do the site work and access improvements is being sought. A commitment for diesel fuel has been secured (see above).
- ⇒ An **electrical contractor**, to provide and do everything electrical from start to finish, is needed.
- ⇒ Cash contributions are needed for this project to cover all materials and services that do not get donated. Donors at all levels are needed to make this project happen. All contributions will be fully designated to this TTU poultry project and can qualify as a charitable contribution. Donors will be permanently recognized for their contributions and support.

For more information and to discuss donating materials, services or to pledge a cash contribution, please contact Dr. Zac Williams at TTU at zwilliams@tntech.edu or (931) 371-6134; Dale Barnett with TPA at dbarnett@tnpoultry.org or (931)434-8045, or a TPA Board member.

A BIG THANK YOU TO OUR TPA ALLIED MEMBERS

WHO HAVE MADE SIGNIFICANT COMMITMENTS AND CONTRIBUTIONS TO THE

TENNESSEE TECH UNIVERSITY

BROILER HOUSE PROJECT

This broiler house at TTU would not be possible without the generous contributions & commitments for equipment, materials, and services made by these companies listed below. The students at TTU, for the years to come, and the TN poultry industry thank them immensely.



Doug Dountz Blountsville, AL 205-429-4411

www.smithpoultryalabama.com/home.html



H&H Metal Products, Inc. Michael Primavera, owner 888-773-8325

info@hhmetalproducts.com www.hhmetalproducts.com/home/products/ agricultural

RODRIGUEZ BUILDERS, INC.

Roy Rodriguez Fulton, KY 270-468-5911 rodriguezbuildersinc@gmail.com



AFS Corporation Chad Atherton Livermore, KY 270-733-4900 or 270-316-9032 info@theafscorp.com www.theafscorp.com/



Cumberland Poultry Equipment a division of the GSI Group Brian Johnson and Pat Meggs Brian - 217-820-3530 br.johnson@gsiag.com



InsulMasters Bobby Hill - 865-591-5313 bobby@insulmasters.com www.insulmasters.com



CAM Electric Craig McManus Union City, TN 731-504-8058 camelectric2004@gmail.com http://ucelectrician.com/



Campbell Lighting, Inc. Pearcy, Arkansas 800-359-7265 dan@campbell-lighting.com



To join this list please contact:

Zac Williams at zwilliams@tntech.edu or 931-372-6134 or TPA at dbarnett@tnpoultry.org or 931-434-8045



Antibiotic-free chicken: The industry under the microscope

March 15, 2016 by Benjamín Ruiz in WattAg.net

During the Ceva Poultry Vaccinology Summit, different production perspectives of ABF chicken and their impact were analyzed. The use of antibiotics is one of the growing challenges in producing safe animal protein today, and everyone is watching chicken production. It is estimated that 20 percent of food is lost to animal diseases. That means we need to protect our food sources. But, without antibiotics?

Production without antibiotics was the main topic during the first day of the <u>Ceva</u> Poultry Vaccinology Summit on March 14 in Barcelona, Spain. <u>Dr. Ashley Peterson</u>, Vice-President of Science and Technology of the <u>National Chicken Council</u> (NCC), spoke about the U.S. perspective. It is noteworthy to mention that the NCC represents 95 percent of the chickens produced in that country and that 22 percent of U.S. chickens are exported.

Of the total number of chickens produced in the U.S., 10 to 15 percent are already produced antibiotic-free and 40 percent with a restricted use. Antibiotic-free (ABF) production, also known as NAE (no antibiotics ever), may include these compounds if birds become sick, but chickens must be commercialized differently.

We may be filled with acronyms, but Dr. Peterson said that, "If the label does not have these acronyms, the consumer believes that the chicken does have antibiotics, which is not the case."

However, there is an issue we should take into account that, if chickens get sick, there is an obligation to administer antibiotics, from the ethical and animal welfare point of view.

Dr. Peterson also asked who among the various actors – consumers, legislators/government, retailers, industry – is leading the industry? Because apparently the industry that uses poultry products succumbs to pressure from consumer groups, not based on scientific facts and without consulting the industry to see if it is economically feasible.

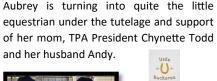
Another important point is that **most** <u>antibiotics</u> <u>used in animal production are not used in human medicine</u>, nor are human antibiotics used to promote growth.

However, despite all this, "Every day there are more companies that want to be supplied antibiotic-free chicken." Another important aspect is that because of the different terms used, there is much confusion among consumers, which adds on to the ignorance. For example, according to a study conducted by the NCC, the consumer believes antibiotics are used "because of mishandling or to promote growth," which is not the case.

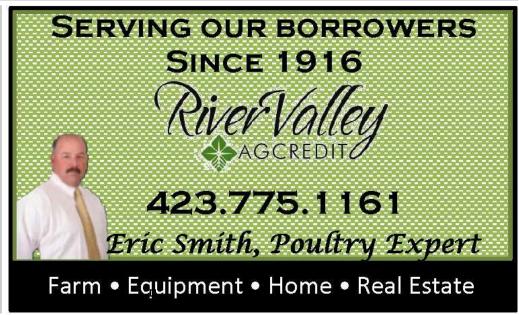
Finally, Dr. Peterson spoke about the impact of eliminating antibiotics in production, for which there are four key points: Mortality, Days to market, Downtime and Stocking density.

Among the various things she talked about, she mentioned that **one antibiotic-free chicken house may represent 300 fewer people fed in a year**. Seeing this, we cannot forget sustainability, and also animal welfare, as there will be more moisture in the bed and can present health problems such as necrotic enteritis.

What are the future trends? She pointed out three specific things: the use of coccidiosis vaccine, the development of alternative antibiotics and finally and to better use vaccines instead of antibiotics, for which "there must be innovation in animal health".







TN Right-to-Farm Statute Update

The TN General Assembly passed legislation this past spring of 2016 strengthening the right-to-farm statutes for farmers. The passage of HB1941/SB2591 revises the present law provisions governing the rebuttable presumptions that farms, farming operations, and new type of farming operations are not public or private nuisances.

Under previous law, there were two different rebuttable presumptions (discussed below), one that applies to "farms and farming operations" and one that applies to "new type of farming operations." A "new type of farming operation" means a farm operation that is materially different in character and nature from previous farming operations and that is initiated subsequent to the date that the person alleging nuisance became the owner or lessee of the land, the use or enjoyment of which is alleged to be affected by the farming operation. This bill removes the separate rebuttable presumption for a new type of farming operation, thereby making all farms and farming operations subject to the one rebuttable presumption.

The only difference in the presumptions under present law is that the presumption for a new type farming operation only applies if the new type of farming operation exists for one year or more on the land that is the subject of an action for nuisance before the action is initiated. Otherwise, it is presumed that the farm or operation is not a nuisance and the presumption may be rebutted only if the person claiming a nuisance establishes by preponderance of the evidence that:

- (1) The farm operation, based on expert testimony, does not conform to generally accepted agricultural practices; or
- (2) The farm or farm operation alleged to cause the nuisance does not comply with any applicable statute or regulation, including without limitation statutes and regulations administered by the department of agriculture or the department of environment and conservation.

A special thank you is expressed to the TN Farm Bureau Federation and to the TN Department of Agriculture for their support and efforts in getting this legislation strengthened and passed.

Would you like to advertise in the TPA newsletter? Contact Tracy at (931) 225-1123 or tracy@tnpoultry.org for more information.





If it's not consistent, safe and effective like PLT, you're just being taken for a fast ride.



There's little value in a product that only works under certain conditions—even less when it can be detrimental

to your birds. PLT®-Poultry Litter Treatment is the only product that:

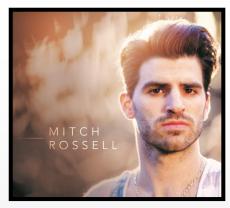
- Pulls moisture from the air and litter so activation happens in any conditions—wet or dry
- Effectively lowers pH for an extended period to create a more favorable litter ecology for birds which discourages harmful microflora

• Is non-hazardous and can be safely applied for ammonia and pH control any time birds are in production

You'll never get watered down performance. PLT-always safe and effective.

JHAG WE KNOW PH MATTERS

Mitch Rossell named TPA Annual Meeting & Summer Getaway entertainer for August 6



Mitch Rossell, originally from the hills of East Tennessee, made the move to Nashville in December of 2009. His life growing up was filled with adversity, which Rossell credits for his tenacity and grit...he says "God sharpens you through your struggles, He uses them to make you effective in what your work here will be". Rossell found out what that work was not long after he picked up the guitar around the age of 18...so he finished college and two weeks after he received his diploma, he packed his car for Music City. For a more complete story, Rossell gives details on a monologue he shares on his latest studio album, "I Got Dressed Up For This".

At 28, Rossell continues to forge ahead. In April of 2014, Rossell charted #27 on the iTunes Top 100 Country Albums with his album "I Got Dressed Up For This". Rossell has released several successful music videos in support of the album. In April of 2015, he was named to the Academy of Country Music Top 15 Rising Artists Zinepak that released exclusively to

Walmart Stores Nationwide. He has garnered over 7 million views on his YouTube channels as well as over 50,000 fans across his social media outlets.

Throughout his career, Rossell has teamed up with several of country music's biggest stars, such as Eric Church, and more recently his musical hero, Garth Brooks. Earlier this year Rossell invited Brooks to attend a showcase he was playing in Nashville. Rossell says he never thought the superstar would show up.

"He's got so much going on, and as much as I wanted to hope he'd come, I really didn't think it would happen," Rossell says. He was shocked when 30 minutes before show time a deliveryman showed up with a half-dozen pizzas, saying they were from Garth. Rossell was blown away by the gesture, but Garth wasn't done yet. Moments later, the country legend walked in the door and watched the entire show from the back wall of 12th and Porter in downtown Nashville. Since then, the two have written together and Garth even invited Mitch to share the stage with him on acoustic guitar and background vocals in Dallas, TX.

Mitch remains humbled by the journey, and in a recent interview he stated... "No matter what dreams you pursue, it's not always glamorous. Matter of fact, MOST of it isn't. I have grinded, clawed, fought, and doubted myself plenty of times...but God, friends and family, and the fans that supported me always threw me a rope at the last minute. Surround yourself with good people, work hard, pray hard, and take it from me...dreams can come true."



The company you trust



FOR MORE INFORMATION, CONTACT:

Brandon Bess Area Sales Manager Brandon.Bess@Merial.com 336.214.9258 Mike Johnson Senior Sales Manager/Key Account Manager Mike.Johnson@Merial.com 678.644.8463

avian.merial.us

HatchPak® Cocci III is a registered trademark of Merial. © 2016 Merial Select, Inc. Gainesville, Georgia. All rights reserved.

Whole Foods Announces it Will Shift to Slower-Growing Chicken Breeds

March 18, 2016, from Animal Health

Global Animal Partnership (GAP), a farm animal welfare standards organization, announced its intention over the next eight years to replace 100 percent of fast-growing chicken breeds with slower-growing breeds for all levels of its 5-Step Rating Program. Whole Foods Market quickly announced it will follow suit by requiring all its producers to move away from fast-growth breeds of chicken.

GAP is a nonprofit charitable organization founded in 2008. The 5-Step program is a multi-tiered, third party-certified animal welfare program that recognizes producers for their welfare practices. Currently about 600 chicken farms raising 277 million chickens annually use the GAP standard.

"Chicken producers are in the business of providing choice in the marketplace, and we strongly support that choice," National Chicken Council spokesman Tom Super told Meatingplace. "Whether it is traditional chicken, organic, free-range or raised without antibiotics, consumers have the ability to choose products that take into account many factors, including taste preference, personal values and affordability. We do not believe, however, that one production system should be vilified at the expense of another."

Super noted that companies must also consider the negative environmental and sustainability repercussions of switching to birds that reach market weight slower.

"We take pride in the care of our chickens, and the fact is that our national flock is as healthy as it's ever been, but we know it's on us as an industry to do a better job of providing more information on how our food gets from farm to table. Food is an emotionally charged topic, and with conflicting information readily available online and on social media, it's understandable people are concerned," Super added.

NCC recently launched <u>Chicken Check In</u>, inviting consumers to come and take a look at the work the industry is doing to provide safe, healthy and sustainable food. There is <u>information on the site</u> that addresses the issue of growth rates, and <u>videos</u> that explore life inside of the chicken houses.

"GAP has reviewed scientific literature and existing genetics across the world in making this decision, and is confident that this new direction will bring benefit to birds, producers, consumers, and food purveyors alike. Implementing this transition will require significant work, but we are confident we can get there," said Anne Malleau, executive director for GAP.

"Since 2011, Whole Foods Market has used Global Animal Partnership's 5-Step Rating system to provide our customers with standards and information around how the animal was raised for the meat they buy," said Theo Weening, global meat buyer for Whole Foods Market. "Supporting this additional commitment to improve chicken welfare is a step forward in continuing to provide our customers with products of the highest quality and flavor."

According to GAP, fast-growing chicken breeds currently represent 98 percent of all commercially available chicken meat in North America. Modern chickens have been genetically selected for their fast, efficient growth and higher yield of breast meat. GAP asserts that this has had detrimental impacts on the welfare of broiler chickens, including immune and musculoskeletal problems.

NC Says Permit Unnecessary for Dust-Rainwater Mix

May 19, 2016, provided by the United Egg Producers

Rose Acre Farms (RAF) reached recently a successful end to a long and protracted fight with the North Carolina Department of Environmental Quality (NCDEQ) when the agency finally acknowledged that RAF did <u>not</u> need a federal permit under the Clean Water Act for the stormwater around layer houses when it mixes with dust from the houses' exhaust.

NCDEQ, with support from U.S. Environmental Protection Agency (EPA), have tried to force RAF to get a federal NPDES permit for this stormwater. The NCDEQ argument was that when the animal house exhaust dust mixes with it, the stormwater becomes "process wastewater" and is a "point source discharge" in terms of Concentrated Animal Feeding Operation (CAFO). NCDEQ made this contention despite the fact that a federal district court in West Virginia found the exact opposite a few years ago. In the *Alt* case involving a broiler farm, the court found that rainwater falling between animal houses is agricultural stormwater and is exempt from point source *National Pollutant Discharge Elimination System* (NPDES) permitting — even when it mixes with dust from the animal house. In now acknowledging that this dust mixed with rainwater is agricultural stormwater, NCDEQ granted RAF's longstanding request for a state animal feeding operations permit under North Carolina state law.

This decision should help deter EPA and other state agencies from trying to impose federal CAFO NPDES permits on rainwater mixed with animal house dust.

The feed mill at the National Poultry
Technology Center (NPTC) at
Auburn University displays the
cleverly manufactured modules
designed to be reliably shipped in
containers to locations around the
world for quick set up and
assembly.



Poultry Slaughter Report:

Ready-to-Cook Weight Down 2% from Last Year

Released May 25, 2016 by USDA

- **April 2015** contained 22 weekdays (including 0 holidays) and 4 Saturdays.
- **April 2016** contained 21 weekdays (including 0 holidays) and 5 Saturdays.

Poultry certified wholesome during April 2016 (ready-to-cook weight) totaled 3.83 billion pounds, down 2 percent from the amount certified in April 2015. The March 2016 revised certified total at 4.09 billion pounds, was up 4 percent from March 2015. The March revision represented an increase of 2.03 million pounds from last month's preliminary pounds certified.

The preliminary total live weight of all federally inspected poultry during April 2016 was 5.06 billion pounds, down 2 percent from 5.15 billion pounds a year ago. Young chickens inspected totaled 4.37 billion pounds, down 1 percent from April 2015. Mature chickens, at 65.2 million pounds, were down 9 percent from the previous year. Turkey inspections totaled 604 million pounds, down 2 percent from a year ago. Ducks totaled 15.5 million pounds, down 8 percent from last year.

Young chickens slaughtered during April 2016 averaged 6.19 pounds per bird, up 1 percent from April 2015. The average live weight of mature chickens was 5.82 pounds per bird, up 1 percent from a year ago. Turkeys slaughtered during April 2016 averaged 31.2 pounds per bird, up 1 percent from April 2015.

Ante-mortem condemnations during April 2016 totaled 11.9 million pounds. Condemnations were 0.24 percent of the live weight inspected, as compared with 0.23 percent a year earlier. Post-mortem condemnations, at 40.8 million pounds, were 1.05 percent of quantities inspected, as compared with 1.06 percent a year earlier.





CME Crop Prices

Source: Egg-Cite.com, May 27, 2016

At the close of trading on May13th the <u>Chicago Mercantile Exchange</u> (<u>CME</u>) quotations for corn, soybeans and soybean meal with values for May 6th in parentheses were:

COMMODITY

Corn (cents per bushel)

May 384.0 (376.0) July 390.6 (377.0)

Soybeans (cents per bushel)

May 1,055.6 (1,029.0) July 1,062.6 (1,034.8)

Soybean meal (\$ per ton)

May 368.9 (338.9) July 361.3 (342.1)

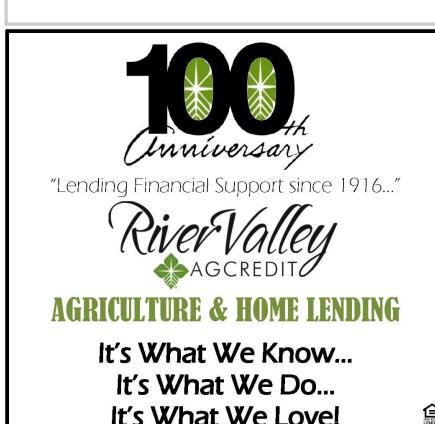
Notes:

- 8 cent per bushel (2.1 percent) increase in May corn
- 27 cent per bushel (2.6 percent) increase in May soybeans
- \$32 per ton (9.4 percent) increase in May soybean meal

For each 10 cent per bushel change in corn 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 broiler production would change by 0.25 cent per pound live wt.

See posting on the May 10^{th} <u>USDA-WASDE Report</u> for an update on quantities and prices of commodities. \Box



www.RiverValleyAgCredit.com 1-877-422-4203

GREEN EARTH SOLAR

Our Clients Include:







Calfee Dairy

Newman Farms

Knoxville Convention Center

Along With:

Harrison Dairy Davis Dairy ORNI

US Park Service University of Tennessee Vanderbilt University Clayton Homes Rockcastle Hospital

Toyota Corportion Hillside Winery Colorwheel Farm

Sweetwater Valley Farms Applebaum Farms Thunder Hollow Farm Y12 and many more!

BENEFITS OF GOING SOLAR

- Presently, the USDA offers a REAP grant that pays for a significant portion your system
- A federal tax credit of 30% is available in addition to the USDA grant
- Accelerated depreciation is available using section 179 deduction which allows 100% depreciation in the first year of opperation.
- ROI typically runs between 24% 43% and pays for itself in 3 - 5 years
- Life of a Solar Array is 25+ years
- There are no moving parts to break down or wear out

WHY CHOOSE US?

- Licensed State Electical and Solar Contractor
- One of the oldest PV firms in the state
- We do all the grant paperwork for you
- We have 100% customer satisfaction and offer the only 1st year revenue guarantee in the state
- Our team of designers and project managers have senior level NABCEP certifications

For more information Call us directly: Our office 865-769-7337 Trevor Casey 865-660-5400 Cory Anderson 865-256-6008 Or visit: www.greenearthsolar.net



Green Earth Solar, LLC 9111 Cross Park, suite E-120 Knoxville, TN 37923

Researcher Makes Progress toward Necrotic Enteritis Vaccine

Mar. 17, 2016 — USPOULTRY and the USPOULTRY Foundation announce the completion of a funded research project at the University of Connecticut in Storrs, Conn., in which researchers evaluated the use of a novel live vaccine to prevent necrotic enteritis in broilers. Necrotic enteritis is a disease produced by a bacterium called *Clostridium perfringens*, which may grow in the intestinal tracts of chickens and turkeys and produce toxins which cause illness and mortality in flocks. Dr. Joan Smyth used a novel isolate of the *clostridium* organism, which does not cause the disease as a live oral vaccine in young chickens. She showed the inoculated birds developed antibodies to *clostridium* and some vaccine formulations provided partial protection against the disease. Although the vaccine does not provide full protection, this research supports the concept of using a live vaccine to protect against necrotic enteritis and will stimulate further research to improve the effectiveness of this live vaccine.

Newcastle Disease: A persistent worldwide problem

International Poultry Production has published a great document addressing Newcastle Disease in length that explains why classical vaccines may have impassable limitations. To learn more about how a new live recombinant vaccine of the rHVT-F vector type (Vectormune® ND) really opens new perspectives regarding the long-term control go to http://www.positiveaction.info/digital/Supplements/Newcastle Disease/.

Broiler study shows challenges and potential of drug-free production

In Poultry Health Today

Broilers raised in a drug-free program had a higher feed-conversion ratio, decreased mean daily weight and decreased mean live marketing weight despite administration of antibiotic alternatives, according to Martine Boulianne, DVM, PhD, chair of poultry research at the University of Montreal.

Boulianne and her colleagues compared the performance of 51 drug-free flocks with the performance of 51 traditionally raised paired flocks. The 14-month study involved over 1.5 million birds and was conducted on eight commercial broiler farms in Quebec. For more detailed information go to: More

WITH OUR FLUXX 14" FEED PAN, IT'S ALL ABOUT SPACE.



With the FLUXX 14" feed pan, you'll enjoy the benefit of 1,318 more inches of feeding space with the same number of pans. THAT'S LIKE HAVING 30 MORE FEED PANS FOR FREE!

BIG DUTCHMAN FLUXX 14" PAN		COMPETITOR'S FEED PAN	_
432	TOTAL PANS	432	000
44.3"	FEED SPACE PER PAN	*41.25"	
19,138"	TOTAL FEEDING SPACE	17,820"	o oi orio

For fast starts, bigger finishes, and a more uniform flock, contact a Big Dutchman representative, or distributor.

We're a results driven company, and we'd like to help you find positive results for your business.



+1 616 582 4009 | bigd@bigdutchmanusa.com | WWW.BIGDUTCHMANUSA.COM

Attitudes Are Changing ODEEFABAR It should come as no surprise that the Millennial Generation—who raised sharing photos of their meals to an art form—actually cares deeply about what they are eating. The most progressive retailers have already responded to consumer demand for high-quality, humanely raised poultry. This isn't just a fad—it's a trend. For over 40 years, Hubbard has been The dominant player in the Premium breeds markets in Europe & the rest of the world. And we are poised to help YOU capture your share of the largest generation in US history. Hubbard is a company of YOUR CHOICE, OUR COMMITMENT GROUPE GRIMAUD www.hubbardbreeders.com



Tyson Shelbyville's 2016 Ag Day on the Hill cooking team: Leonard Locke, Logan Ragland, Kevin Taber and Tim York.

Visit our website at www.tnpoultry.org
Like us on Facebook and Twitter (@tnpoultry)

ALLIED MEMBER NEWS

Marel USA Inc. has announced Don Stone as their new Territory Sales Manager for TN, KY, MS, and LA. Don has spent over 30 years in the poultry industry, previously working for Cargill, Townsends and Pilgrims before joining Marel in 2012.

BioSafe Systems introduces its first new product of 2016, GreenClean® Pond Block. This proprietary blend of naturally occurring bacterial strains and enzymes is formulated to increase water quality and clarity. GreenClean® Pond Block works by reducing excess nutrients in ponds that are generated by organic debris, livestock and fish waste and fertilizer run-off while also improving the overall health of the pond ecosystem.

Chore-Time recently introduced a floor flood feeder model with many of the advanced features found on its premium feeders. The Chore-Time REVOLUTION Floor Flood Feeder lets you add more comfort, performance and efficiency to your flood feeding program. The new REVOLUTION® Floor Flood Feeder offers the management simplicity of flood windows along with the feed conversion advantages and greater bird comfort offered by the entire REVOLUTION® Feeder Family, according to **Dave Laurenz**, Director of Sales and Marketing for Chore-Time.

Several TPA members recently attended the **Merck Animal Health** symposium in Nashville May 23-25.



TPA Board Member Frank
Dougherty (Aviagen) with TPA
President Chynette Todd and Andy
Todd (Keystone Foods).

David Walker & Benny Sims with K Supply Company are pictured with Paul Burke, TN Sales Rep for Merck Animal Health. →





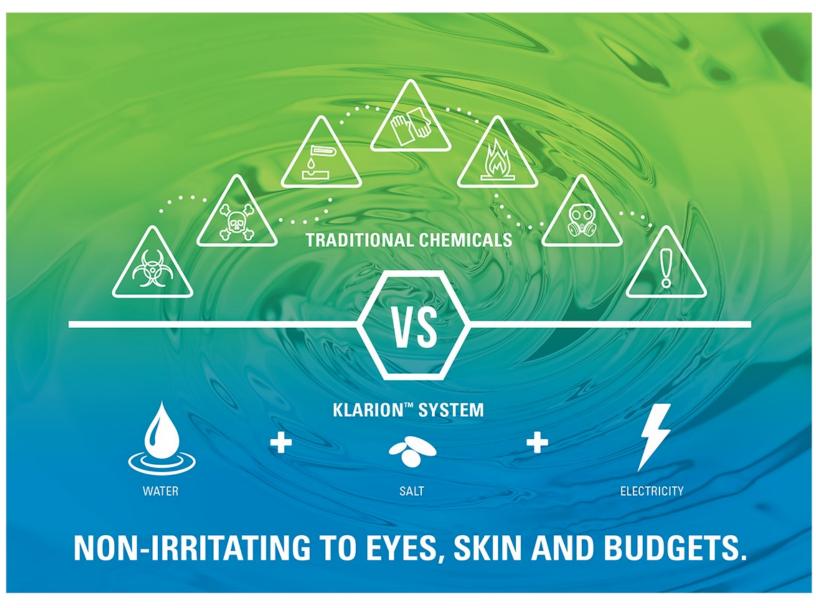
TPA Secretary/Treasurer Shane Joyner (Tyson - Obion Co.) finished in a tie for first in the sporting clays shoot, with Andy Todd (Keystone Foods) and Scott Files (Pilgrims) also placing in the top 5.

Andrew Blair (Tyson - Shelbyville) was on the winning golf team that played at The Hermitage that day.

Jones-Hamilton Co. As the poultry industry throughout the world moves away from the use of preventive antibiotics including ionophores, understanding and controlling relative humidity (RH) in the production environment becomes critical. Download the *House Management in an Era of ABF Production* white paper to learn more about the link between RH, litter quality and gut health, and more, as provided by the JonesHamiltonAg.com.

Big Dutchman - Jeff Ratledge had the chance to show their new egg conveyance belt to Randy Yates, Complex Mgr. for the Cobb-Vantress hatchery in Lafayette, and to Craig Benich, GM for the Dry Creek Pedigree Farm.





"IF I WENT BACK TO TRADITIONAL CHEMICALS, HALF MY WORKERS WOULD QUIT!"

KLARION CLEANING AND SANITIZING SYSTEM

Keeping your hatchery clean is now easier, safer and more cost-effective than ever before:

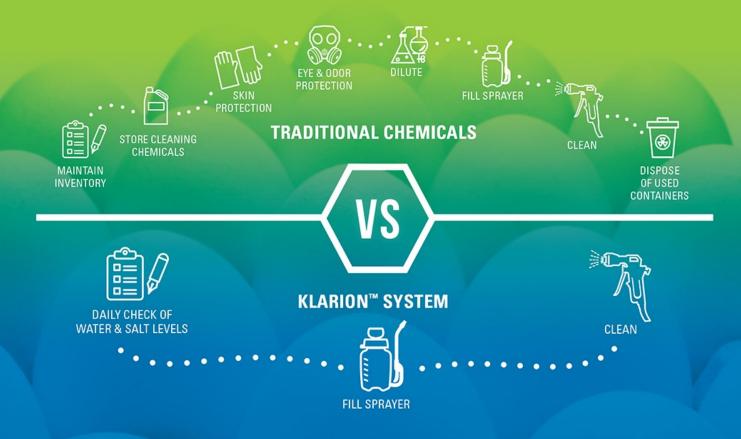
- The Klarion system produces a powerful cleaner and sanitizer in your facility on demand in the volumes you need
- These solutions are produced in an electrolytic cell using just water, salt and electricity
- The cleaner and sanitizer are safer for employees than traditional chemical cleaners and sanitizers and are non-irritating to the eyes and skin.
 Workers no longer need to wear protective gear
- The solutions are produced in ready-to-use concentrations. The risk of chemical burns caused by handling concentrated chemicals is eliminated
- Pay for what you produce; there is no investment in capital equipment.
 Users typically experience savings of 30% compared to the use of traditional chemicals

SEE IF YOUR HATCHERY QUALIFIES FOR A FREE TRIAL: VISIT KLARION.COM OR CALL 630.517.1010





From Spraying Systems Co.



SPEND LESS TIME CLEANING AND MORE TIME ON PRODUCTION.

BY THE TIME YOU'RE READY TO CLEAN USING TRADITIONAL CHEMICALS, YOU COULD BE DONE WITH THE KLARION SYSTEM.

KLARION CLEANING AND SANITIZING SYSTEM

Keeping your hatchery clean is now faster, safer and more cost-effective than ever before:

- The Klarion system produces a powerful cleaner and sanitizer in your facility on demand in the concentrations and volumes you need. No need to order, store or dilute chemicals
- These solutions are produced in an electrolytic cell using just water, salt and electricity
- The cleaner and sanitizer are non-irritating to eyes and skin and are fragrance-free. No protective gear for workers is required
- Pay for what you produce; there is no investment in capital equipment. Users typically experience savings of 30% compared to traditional chemical cleaners

SEE IF YOUR HATCHERY QUALIFIES FOR A FREE TRIAL: VISIT KLARION.COM OR CALL 630.517.1010







Now signing guaranteed delivery propane contracts for the 2016/2017 season with reasonable credit terms available

PROPANE UPDATE & NEW FARM INCENTIVE PROGRAM

June 1, 2016

As of May 20th, U.S. **propane stocks** were at 74.1 million barrels which is 1.2% higher than last year, and nearly 30 million barrels higher than May of 2014. Propane pricing at Mt Belvieu, TX has been trading in a range of \$0.47 to \$0.57 for May. However, exports continue to be a factor in propane supply. The recent law change to allow export of crude oil may increase, or may decrease the export market for propane. Industry watchers are cautiously observing the market to determine a trend. Many are convinced that the current historically high levels of propane in storage are not an indication of pricing direction for the winter due to the huge investments made in export capacity over the past 5 years. Previously, the accepted level of storage needed for a normal winter was 60 million barrels of propane, and the current U.S. stock is at 74 Million. However, no one is certain of the amount of export to be expected for the winter. Many experts have stated that 60 million gallons is no longer an adequate supply for the U.S., and a much higher level of propane storage is needed to weather a cold winter. Some meteorologist believe that the current El Nino pattern has subsided and the U.S. could see much cooler weather in the next winter. If so, the level of inventory needed would be much higher than the prior year.

On May 31, 2016, **propane wholesale prices** were \$0.52 at Mt. Belvieu, TX. Allowing for an average of \$0.41 per gallon for tariffs, handling and delivery to most areas, this brings the average current retail price to **\$0.93/gal**. Larger accounts can often negotiate a lower price agreement by as much as \$0.05/gal., or more. To follow Mount Belvieu, TX spot pricing go to https://ycharts.com/indicators/mont_belvieu_propane_spot_price.

Propane incentives for the heating of poultry houses are available through the <u>Propane Farm Incentive Program</u> (FIP) provided by the Propane Education and Research Council (PERC). New poultry (swine and greenhouse) heating systems may be eligible for FIP incentives of **\$0.10/sq.ft.**, **up to \$2000**, when installed as part of an entire system installation; it is not a rebate program. The complete heating system must either be installed in new construction or as a conversion from another fuel source. To download the program guidelines and learn what equipment more specifically qualifies for the program go to www.propane.com/agriculture/programs-and-incentive/propane-farm-incentive-program/ or contact farmincentive@propane.com.

Survey shows nearly two-thirds of consumers find chicken labels to be confusing

WASHINGTON, D.C. – March 15, 2016 – As part of the National Chicken Council's (NCC) Chicken Check In initiative, NCC today announced a new chicken labeling glossary - aiming to provide consumers with the facts when it comes to chicken terms and labels. The glossary comes on the heels of national survey findings showing that nearly two-thirds (62 percent) of consumers find chicken labels and packaging to be confusing.

The new glossary provides fact-based descriptions to a comprehensive set of terms often found on chicken packages on store shelves. Consumers will gain a better understanding on terms related to type of bird, what chickens are fed, the types of housing chickens are raised in, and more - empowering them to make informed, fact-based purchasing decisions.

"We believe in giving the consumer choices in the type of chicken they want," said NCC spokesperson Tom Super. "However, what this research shows is that the terms used for those choices can be confusing. This glossary addresses that confusion and arms the consumer with the information they need to continue choosing safe, affordable and healthy chicken."

This resource comes on the heels of a release by the U.S. Poultry & Egg Association (USPOULTRY) of a <u>new video</u> that examines the various poultry packaging labels. The video also provides some clarity about the labeling of fresh and frozen chicken products and also reassures that American poultry products are among the safest and healthiest foods anywhere in the world.

The <u>glossary</u> can be found on NCC's <u>Chicken Check In</u> website – which invites Americans to learn more about how the chicken they purchase and feed their families is raised. <u>Chicken Check In</u> provides consumers with the opportunity to get a close look at how chickens are raised, from the farm to grocery store shelves. From videos to answers to frequently asked questions, <u>Chicken Check In</u> is a resource for consumers to get the information they are seeking about chicken care.

The press release can be found here. D

CO2 stunning for poultry processing is gaining worldwide interest

March 16, 2016 from WorldPoultry.net

Globally, the interest in CO2 stunning systems for poultry is growing, in particular those with a five-six minute CO2 recipe. In this article, Meyn Food Processing Technology, Marel Stork and a Dutch scientist give their views on the latest developments. For more information go to: <a href="https://www.worldpoultry.net/Health/Articles/2016/3/CO2-stunning-for-poultry-gaining-worldwide-interest-2766995W/?cmpid=NLC|worldpoultry|2016-03-16|CO2 stunning gains global interest



Binkley Hurst 888-414-7518

www.binkleyhurst.com

CALL US TODAY TO FIND YOUR LOCAL DEALER Why change litter with each new flock of birds? The LVI Deluxe is the only implement you'll need to convert your poultry litter into pathogen-free compost. With exclusive convenient features including hydraulic side shift and tilt, our dual auger design cuts through the toughest litter to produce quality windrows and naturally reduce mortality rate and disease, as well as darkling beetle, fly, and insect population in the litter. For smaller operations and lower horsepower requirements, look no further than the JR60 Compact Series. Featuring standard upper and lower extension augers, the JR60 creates tall, well-formed windrows for optimum heat generation and composting results. With innovative designs and top-notch customer service, the full line of LVI implements can help make your operation the best it can be...

...because anything less than the best is for the birds.

Comparing LED Lamps on a Commercial Broiler Farm - Once Innovations & Overdrive

By Bill Brown, Gene Simpson, Jeremiah Davis, Jesse Campbell, Dennis Brothers, and Jim Donald* April 2016, from the <u>Alabama Poultry.org</u> magazine on pages 28-30

LED lighting technology for poultry houses has rapidly progressed over the past several years. There is no question that LED lighting provides economic and performance incentives for growers and integrators alike when compared to other lighting technologies (incandescent, CFL, CCFL, sodium vapor, etc.). There are a large number of LED brands and models being marketed to broiler producers, and they vary in suitability, longevity, warranty, initial cost, operational cost, and several other factors. However, the poultry industry has been exposed to several claims of performance increases by some LED vendors. Most of these claims appear questionable and have not been substantiated in comparative studies conducted by objective third parties. In broilers, differences within flocks and across multiple flocks with respect to genetics, parent stock age, hatchery conditions, nutrition, vaccination, in-house conditions, and other factors typically influence flock performance far more than does light alone. In an effort to demonstrate two of the more common brands and models of LEDs, a simple side-by-side comparison of 3 lamps was undertaken in early 2016 on the Delmarva Peninsula.

To view this complete technical article, please go to page 28 in the April 2016 <u>Alabama Poultry magazine</u> or contact TPA Executive Director Dale Barnett at <u>dbarnett@tnpoultry.org</u> to request it by email.

*Bill Brown, posthumous co-author, was a Poultry Extension Agent with the University of Delaware, and Gene Simpson, Jeremiah Davis, Jesse Campbell, Dennis Brothers, and Jim Donald are faculty members with the National Poultry Technology Center (NPTC) at Auburn University.

OSHA's Expanded Poultry Inspections outside Scope of Legal Limits — from the National Chicken Council

Apr. 18, 2016 – Like any employer, poultry processors are subject to inspections by the Occupational Safety and Health Administration (OSHA), and the industry is committed to the safety, health and wellbeing of our workforce. That commitment is demonstrated by the tremendous progress the poultry industry has made in reducing worker injury and illness rates, which have declined 81 percent in the last 20 years and continues to decline according to the 2014 Injury and Illness Report released by the Bureau of Labor Statistics.

The U.S. Poultry & Egg Association, National Chicken Council and National Turkey Federation are concerned about OSHA's recent attempts to expand OSHA authority to conduct wall-to-wall inspections of poultry processing facilities whenever they receive notice of any accident or employee complaint. There are legal limits on when and how OSHA may inspect, and we believe those inspections should be conducted within the scope of the law.

(continued on page 20)





System handling daily poultry mortality throughout North America.

The Ecodrum™ is a **Biosecure**



Jeff Dietert and Family, Laneville Texas Ten House Broiler Operator

The Ecodrum™ System is eligible for EQIP Cost Share in many States.

To learn more about how the *ecodrum*™ can benefit your operation, contact us at:

701-446-6139 Atlanta, GA byron@ecodrumcomposter.com

ecodrumcomposter.com

Deli employees report meat slicers not cleaned often enough

FROM **NEWS DESK** | APRIL 1, 2016

Managers and employees at more than half of the delis in a recent study reported that retail operations are failing to meet U.S. Food Code specifications because meat slicers are not cleaned often enough.

Meat slicing machines in retail delis are notorious for harboring *Listeria* bacteria, as well as contributing to the reputation deli meats have for being a major source of listeriosis infections, according to the Morbidity and Mortality Weekly Report from the U.S. Centers for Disease Control and Prevention (CDC).

"Listeria monocytogenes causes the third highest number of food borne illness deaths — an estimated 255 — in the United States annually, after non-typhoidal Salmonella species and Toxoplasma gondii," the CDC reports. "Deli meats are a major source of listeriosis illnesses, and meats sliced and packaged at retail delis are the major source of listeriosis illnesses attributed to deli meat," according to research in the Morbidity and Mortality Weekly Report from CDC. The Food Code specifies the minimum frequency for cleaning is once every four hours. Interviews with staff from 298 randomly selected delis showed that 54.2 percent of the delis failed to clean their slicers every four hours. For a full report, click on report.

TPA BOARD MEMBERS

President - Chynette Todd Keystone Foods Rickman, TN (270) 647-0364 chynette.todd@gmail.com

1st VP - Jay Daniels Hubbard, LLC Pikeville, TN - (423) 447-7679 jay.daniels@hubbardbreeders.com

Secretary/Treasurer - Shane Joyner Tyson Foods - OBC Union City, TN - (731) 796-1733 shane.joyner@tyson.com

2nd VP - Andrew Blair Tyson Foods - Shelbyville (731) 796-1519 andrew.blair@tyson.com

Past-President - Scott Black Cobb-Vantress, Inc.

TPA Board Members

Dwight Curl, Marel Stork Poultry
Don Davis, Koch Foods - Chattanooga
Frank Dougherty, Aviagen
Shane Guy, Keystone Foods
Mark Ham, American Proteins, Inc.
Eric Killen, The Vincit Group
Clint Lauderdale, Jones-Hamilton Co.
Dale McLerran, Grower - Moss, TN
Tony Swindle, Grower - LaFayette
David Tallent, Grower - Spring City
David Wilds, Koch Foods - Morristown

GOGGIN

WAREHOUSING

LOGISTICS • TRANSPORTATION • STORAGE • DISTRIBUTION

WE PROVIDE MORE

Feed Mill and Live Haul Transportation Services Available

931-684-8971 Contact: Keith Bellenfant

Selecting LED bulb and dimmer combinations for broiler houses

The Univ. of Delaware has information and a scoring tool available online that can be used for choosing LED bulb and dimmer combinations for broiler houses. It is set up to choose by bulb, or by dimmer, on their website available at http://agdev.anr.udel.edu/dimmer/intro.php.

This website was designed to help broiler growers compare different light emitting diode (LED) bulbs tested with different dimmers. It provides a score to be used as one of several factors in choosing the most appropriate LED and dimmer combinations for broiler houses. Each bulb and dimmer combination is given a score of 1-100. Scores in the range of 85-97 should be considered as very good matches. This score should be just one of several factors when choosing a bulb and dimmer combination. Other considerations of importance are listed under additional information. \Box

OSHA's Expanded Poultry Inspections outside Scope of Legal Limits (continued from page 19)

Poultry companies currently cooperate extensively with OSHA through:

Normally scheduled comprehensive (i.e.; "programmed") inspections, which can be conducted at any time. Facilities to be inspected must be selected on a random, administratively neutral basis;

Specialized inspections targeted on particular hazards or industries pursuant to special emphasis programs, such as the Regional Emphasis Programs for Poultry Processing in Regions 4, 6 and 7. Facilities must be selected on a random, administratively neutral basis from a list prepared in advance; and

Investigations of a specific accident, injuries, complaints or fatalities. However, the courts have ruled that investigating a specific accident does not give OSHA probable cause to expand the inspection beyond the scope of the initial reason for the investigation, unless they identify other hazardous conditions in the course of the investigation: even then, the inspection may be expanded to include only those areas or conditions as to which OSHA can show probable cause.

While the industry agrees that dedicated investigation of accidents directs concentrated effort and resources for successful strengthening of safety procedures, in a <u>letter</u> to OSHA on Mar. 4, the industry requested that OSHA abide by well-established rules governing the process to select facilities for inspections. The letter was written in response to an announcement from OSHA that the agency would use any accident, complaint or referral at every poultry processing facility as a pretext for conducting a wall-to-wall inspection. The poultry industry expressed its concern that OSHA's plan overstepped the legal boundaries of the Fourth Amendment's bar on unreasonable searches and seizures. These boundaries have been recognized by the U.S. Supreme Court in *Marshall v. Barlow's*, and decisions by the Sixth and Eleventh Circuit Courts of Appeals in *Trinity Industries* and *Sarasota Concrete* held that OSHA must comply with the U.S. Constitution in this regard.

The poultry industry is committed to health and safety, but it also takes the law seriously. We believe that OSHA can fulfill its mission within the bounds set by the Constitution, and we will continue to defend the industry against practices that are not consistent with those guarantees. For more information go to http://www.nationalchickencouncil.org/oshas-expanded-poultry-inspections-outside-scope-legal-limits/.

Virus Elimination. Condensation & Ice Removal. Turnkey Services. Sunbelt Rentals.









Sunbelt Rentals offers a wide range of poultry facility solutions including efficient condensation control and heat treatment solutions for virus elimination. We offer the newest fleet of chillers, industrial air conditioners, heaters, drying equipment, temporary power, blended systems and more. Designed to be self-contained, our equipment provides efficient, dependable performance with easy operation and mobility. In addition, we offer unmatched 24/7 emergency response, turnkey service and highly trained specialists with the knowledge and experience to respond quickly to all of your needs.

24/7 EMERGENCY RESPONSE | 888-379-7454 | SUNBELTRENTALS.COM



DATES TO REMEMBER

HATCHERY BREEDER CLINIC

July 12 - 13, 2016 DoubleTree Downtown Nashville, TN

AP&EA ANNUAL MEETING

July 16 - 17, 2016 Destin, FL

TPA ANNUAL MEETING & SUMMER GETAWAY

August 5 - 6, 2016
DoubleTree Downtown
Nashville, TN

GPF NIGHT OF KNIGHTS

August 13, 2015 Cobb Galleria Centre Atlanta, GA

WOMEN'S LEADERSHIP US POULTRY CONFERENCE

August 18 - 19, 2016 Hilton Sandestin Beach Golf Resort & Spa Destin, FL

LIVE PRODUCTION AND WELFARE SEMINAR

September 13 - 14, 2016 DoubleTree Downtown Nashville, TN

TN FARM BUREAU FEDERATION "SHOOTING HUNGER" SPORTING CLAYS SHOOT

September 29, 2016 Nashville Gun Club Nashville, TN

TN AG ENHANCEMENT COST-SHARE PROGRAM

Application period Oct.1 – Nov. 1, 2016

TPA GROWER MEETINGS

November 8 - 10, 2016
Union City, TN
Cookeville, TN
Shelbyville, TN (pending)
Cleveland, TN

USPOULTRY Provides Ergonomics at Work Training Resources

May 5, 2016 – The poultry industry has been systematically improving worker safety over the last three decades, with current injury/illness rates now essentially the same as manufacturing as a whole. To continue this improvement and as a method of overcoming some of the language barriers that can occur in poultry plants, USPOULTRY has developed a series of posters and companion short animated videos with the goal of illustrating some basic concepts with few, if any, words. The materials address correct posture, adjusting workstands, keeping tools sharp, recognizing symptoms and early treatment. The information is available in two versions: English/Spanish and English/Spanish/Somali.

"The ergonomic materials are only one example of how funds generated by the International Poultry Expo, part of the International Production & Processing Expo, are directed back into the industry. We value the support of our members and exhibitors that has allowed USPOULTRY to create and distribute this information," said Paul Hill, West Liberty Foods, Ellsworth, Iowa, and USPOULTRY chairman.

"The diverse workforce in poultry plants results with many different languages being spoken and presents a great challenge to safety and human resources staffs to adequately train the workforce. We hope that the approach utilized in this series of posters and videos will help increase the awareness of ergonomic principles in our workforce and overcome language barriers," said Paul Pressley, Executive Vice-President of Industry Programs, USPOULTRY.

The posters are available on the USPOULTRY website and can be viewed and downloaded by clicking here. The videos are viewable through USPOULTRY's YouTube page and can be viewed or downloaded by clicking here. D

The International Hatchery Practice publication has the following practical information pertaining to breeding and hatching in the <u>Vol. 30 No. 6</u> issue:

- Newcastle Disease Maximizing immunity with vaccination
- Lighting Preparing breeder pullets correctly for light stimulation
- Incubation Getting it right to produce high quality chicks
- Options to enhance energy efficiency
- Transportation Key issues for protecting chick quality
- Monitoring Temperature management in the first week

To view this information and others, go to http://www.positiveaction.info/digital/IHP/2016/IHP 30 5/. \Box

USDA has prepared the fact sheet titled "The HPAI Indemnity and Compensation Process" that can be accessed by clicking here: www.aphis.usda.gov/publications/animal health/2016/hpai-indemnity.pdf

The fact sheet covers key areas such as the first steps once an AI case is suspected, an overview of compensation, indemnity payments for birds and eggs as well as how to make a claim. It also includes the latest on what information is required for appraisal and indemnity, what is required in a flock plan, depopulation, disposal and virus elimination activities. Important links are also included that will assist with more detailed information, including how the revised flat rate payment system will work and how to register for your System for Award Management (SAM) number. \Box

Not currently a member of TPA?

Contact Tracy at (931) 225-1123 or tracy@tnpoultry.org for more information about member benefits.

New *MyFlock* ™ App from Aviagen Brings Flock Management to Mobile Devices

May 3, 2016 – HUNTSVILLE, Ala. – **Aviagen** has announced the release of *MyFlock*™, an app that gives breeder managers instant access to everything they need to take care of their birds and flocks throughout the production cycle.



Available to all Aviagen customers in the U.S. and Canada, $MyFlock^{\text{TM}}$ offers convenient flock management tips and tools from mobile devices. $MyFlock^{\text{TM}}$ is a portable version of Aviagen's standard flock management guides, offering customers an immediate and interactive pathway to the latest Aviagen advice and performance standards.

From their smart phones and tablets, Aviagen customers can consult step-by-step task schedules, as well as critical advice and information regarding flock management. And, an interactive calendar lets them set reminders of daily activities needed to care for birds and optimize performance.

When users are connected to the internet, *MyFlock*'s data is synchronized, automatically updating to the latest flock information. Therefore, through the sync function, customers have easy and uninterrupted access to the latest versions of Aviagen's online flock management documents, even from areas with no cellular service.

At no charge to customers, $MyFlock^{TM}$ can be downloaded to Android and Apple iOS phones and tablets from any Apple or Google Play store. MyFlock's simple-to-use, intuitive interface means productivity isn't slowed down by an initial learning curve.

According to Kevin McDaniel, president of Aviagen North America, the company continually explores innovative ways to promote the success of its customers, often using mainstream technology to do so. "Smart phones and tablets have enhanced the way we access and use information. Leveraging the benefits of handheld technology, this new digital tool will raise Aviagen customer support to a new level. Our ongoing aim is to empower customers to take the best possible care and get ultimate performance from their birds."



UT researcher studying fat deposition and obesity in broilers and humans

Dr. Brynn Voy is on the faculty at the University of TN in Knoxville in the Dept. of Animal Science where she has a professional interest in physiology and genomics of obesity.

For very different reasons, identifying new means to reduce fat deposition in juveniles is important for both the broiler chicken industry and for human health. Genetic selection for rapid growth produced commercial broiler lines

with marked gains in efficiency of meat production but at the same time inadvertently doubled the deposition of adipose tissue. Excess fat deposition essentially wastes feed, increasing costs to growers during the ~ 7 week window from hatch to market age. Excess fatness also contributes to reduced fertility and immunocompetence that impact both the egg-producing and broiler-breeder segments of the poultry industry. In humans, more than one third of children in the United States are now overweight or obese, which increases their risk of both obesity and its co-morbidities (e.g., hypertension, Type 2 diabetes) as adults (cdc.org). Avians in general are a valuable class of model organisms for studies relevant to adipose tissue lipid metabolism because (unlike rodents) the relative contributions of liver and adipose tissue to triglyceride storage are similar to those in humans. Avians also lack brown adipocytes, creating a model in which to test the impact of diet and other anti-obesity strategies exclusively on white adipocyte (the predominant type of adipocyte in the body) metabolism. Broiler chickens are especially attractive as a model organism for childhood obesity. Like pre-obese children, broiler chicks rapidly deposit fat prior to sexual maturation through a combination of adipocyte hypertrophy and hyperplasia. In addition the diet of the broiler chick can be manipulated at hatch or even in ovo, prior to the development of abdominal adipose tissue, creating the opportunity for early and direct studies into the effect of diet on adipose development. Therefore broiler chickens are not only a livestock species in need of new ways to reduce adipose deposition but also a novel, although underdeveloped, model for studies of childhood obesity.

Current projects in our lab focus on fatty acid oxidation in white adipose tissue and how this pathway can be manipulated by diet, and on the balancing of adipose tissue lipid metabolism and adipogenesis during juvenile growth and development. The overriding tenet of our research program is that a better understanding of the homeostatic mechanisms at work in healthy adipose tissue is critical to identifying processes that lead to obesity and its consequences. We use a combination of transcriptomics, metabolomics, in vivo studies and classical cell biology to address these research areas.

For more information about Dr. Voy and to access her more recent publications pertinent to this topic go to https://ag.tennessee.edu/
AnimalScience/Pages/BrynnVoy.aspx









TTU hosted the State FFA Poultry CDE in April.

Farm Mortality

The most convenient and environmentally friendly method of poultry mortality disposal



American Proteins, Inc. Farm Mortality Service

For information and details, contact Randall Smith

"Our students here at the Auburn University Poultry Unit appreciate the time-saving convenience of our freezers." Mitchell Pate, Director of Poultry Research Unit

"I have been a customer of API Farm Mortality since day one, and have always been pleased with the service." Dorman Grace, poultry producer

256 - 970 - 6100

www.youtube.com/watch?v=69y2_Rd7arg

Gov. Haslam Names Jai Templeton Agriculture Commissioner

Thursday, March 31, 2016

NASHVILLE – Tennessee Gov. Bill Haslam has announced the appointment of Jai Templeton, a sixth generation Tennessee farmer, as commissioner of the Department of Agriculture effective May 1. Templeton will replace Julius Johnson who last week announced his retirement.

Templeton, 44, currently serves as the department's deputy commissioner, leading the day-to-day operations and directing programs and services that range from food safety to animal and plant health to agricultural development.

"Jai has played a critical role in developing the department's 10 year strategic plan to grow Tennessee's agricultural and forest industries. As a lifelong farmer, he will be a champion for the farming industry and continue the department's work to strengthen our rural communities," Haslam said.

Prior to joining the department in 2011, Templeton served as mayor of McNairy County. He and his family have farmed in McNairy and Hardin counties for decades, producing grain, cotton, hay, timber, and cattle.

"I am honored to be asked by Gov. Haslam to serve as a member of his cabinet. Agriculture is my life. The past five years in the role of deputy to Commissioner Johnson have been a wonderful experience for me and I am grateful for the continuing opportunity to serve the agriculture industry," Templeton said. "As a former mayor of a rural county, it is refreshing to work for a department and administration focused on the development of rural Tennessee. I look forward to continuing the great work of this administration to strengthen our farm and forest communities all across our state."

From 1995 to 2003, Templeton served as field representative for former U.S. Representative Ed Bryant. He is a former McNairy County commissioner and former president of the McNairy County Chamber of Commerce, where he helped form the McNairy County Regional Alliance to focus on economic development in the area.

A native of McNairy County, Templeton has a bachelor's degree in business administration from Union University in Jackson, Tenn. He is also a graduate of the University of Tennessee Certified Public Administrator program.

Templeton is a member of the Agri-Center International Board of Directors, the McNairy County - Chester County Cattlemen's Association, the McNairy County Forestry Landowner's Association, the Tennessee Farm Bureau, the National Cattleman's Beef Association, Memphis Ag Club, Mid-South and First Farmer's Cooperative and a former board member of the Tennessee Cattlemen's Association.

He and his wife, Allison, reside on the family farm in Stantonville and are members of First Baptist Church of Adamsville. They have three children, Canon and Eliza Smith, and Mycaela Rhodes and husband, Alex.

Womack Named Deputy Commissioner for the Tennessee Department of Agriculture



NASHVILLE— With nearly 30 years of experience working for the state, Tom Womack will continue his service in a new role as Deputy Commissioner of the Tennessee Department of Agriculture.

Agriculture is in Womack's blood and public service is in his heart. Womack is well-known and highly respected in the agricultural community, having spent the majority of his tenure with the department as its spokesman and director of communications. In 2015, Agriculture Commissioner Julius Johnson appointed Womack Assistant Commissioner for Public Affairs. In that position, Womack provided administrative support for media relations, policy development and

all agency programs ranging from food safety and animal health to forestry, marketing and conservation. Womack also administered the fairs program and the Tennessee Agricultural Museum, the department's primary education and outreach program.

"My entire career has been in service to the citizens of Tennessee, agriculture and rural communities through this department," Womack said. "I am deeply honored and grateful to soon-to-be Commissioner Templeton for the opportunity to contribute in this new way and to help build upon the solid foundation developed by Commissioner Johnson."

From 1999 to 2008, Womack assisted with the administration of the Phase II tobacco grower settlement trust, which provided more than \$170 million in compensation to nearly 50,000 Tennessee farm families. He is a past president of the Communications Officers of State Departments of Agriculture organization, and his communications expertise has been recognized by the National Association of Government Communicators and twice by the National Association of State Departments of Agriculture. He has also served as liaison to the United States Department of Agriculture for agricultural disasters.

Womack obtained his bachelor's degree in Government from Western Kentucky University. He is also a 2003 graduate of the Tennessee Government Executive Institute. A former state secretary and strong supporter of the Future Farmers of America, Womack has been recognized by the National FFA Organization with the Honorary American FFA Degree and currently serves on the board of directors of the Tennessee FFA Foundation.

Tom and his wife Chrystal have five children. The couple raises beef cattle and produce hay on the family farm in White House, which is located on the Sumner/Robertson County line.

□

Gould Named Assistant Commissioner for Public Affairs

NASHVILLE— Agriculture Commissioner Jai Templeton recently announced the appointment of Corinne Gould as assistant commissioner for public affairs for the Tennessee Department of Agriculture.

As assistant commissioner, Gould will focus on strengthening relationships with the public, stakeholders and industry representatives. She will oversee internal and external communications and provide administrative support for media relations, policy development and all agency programs. She will also supervise the public relations team and regional staff and administer the Tennessee Agricultural Museum.



Gould joined the department in 2014 as deputy director for public affairs. She ultimately took on the role of director of communications which included managing the department's rapidly growing social media platforms and expansion of photographic and video contributions.

Prior to TDA, Gould enjoyed a decade-long career in television news. As a producer at the NBC affiliate in Nashville, Gould won a regional Emmy award and was nominated for a national Emmy award for breaking news coverage of the floods that devastated Middle Tennessee in 2010. The recognition was particularly personal for Gould, who lost her own farm to the rising water. That experience and the support she received from her community solidified her dedication to give back to the citizens of Tennessee.

A native of Rhea County in southeast Tennessee, Gould obtained her bachelor's degree in Mass Communication and graduated magna cum laude from Middle Tennessee State University. She is also a graduate of the 2015 Tennessee Government Executive Institute and serves as communications coordinator for her class.

US to Challenge China at WTO over Chicken Duties

May 10, 2016; from a NCC press release

"The U.S. chicken industry applauds today's announcement by U.S. Trade Representative Michael Froman that USTR will request that the World Trade Organization take action against China for its failure to eliminate its anti-dumping and countervailing duties on U.S. chicken exports," said the National Chicken Council and the USA Poultry & Egg Export Council in a joint statement.

As one of the main export destinations for products like chicken paws and wingtips, China is an important market to the United States. The sale of these products added considerable value to the U.S. broiler industry, and the duties imposed by China have unfairly hindered access to this important market.

In 2013, a WTO dispute settlement panel comprehensively found that China's anti-dumping and countervailing duties violated its WTO obligations. Despite that decision, China has still refused to remove these duties. The U.S. government has reasonably tried to work with China since then to resolve this matter consistent with the panel's decision, but China's continued failure to abide by the ruling and to meet its obligations is unacceptable.

"We are heartened to see that USTR will not back down when it comes to enforcing our rights, and in making sure we truly get the market access we bargained for," the poultry groups concluded.

2016 USPOULTRY Human Resources Seminar: Recruiting and Retaining the Workforce of 2016 and Beyond

TUCKER, Ga. – Apr. 27, 2016 – "Despite the negative narrative of worker activist groups such as Oxfam, the poultry and egg industry has a great story to tell regarding employment and advancement opportunities," said Chris Lauderdale, an attorney with Jackson Lewis LLP. Speaking before a record attendance at U.S. Poultry & Egg Association's 2016 Human Resources Seminar in Destin, Fla., Lauderdale shared his perception of the poultry workplace and challenged attendees to always be prepared to share our story.

Commenting on charges that poultry is a low wage industry, Lauderdale shared median wage data published by the Bureau of Labor Statistics. In 2015 in the four largest broiler producing states, the median wage for poultry processing ranged from 81 percent to 95 percent of the non-metropolitan area median wage for all occupations. In addition to wages, the industry provides competitive benefits, contributes to social and economic development in rural communities and helps supply a basic global need, providing employment that is both important and rewarding. Lauderdale believes that poultry can and should be the employer of choice in many communities and encouraged the human resources managers in attendance to promote a fresh narrative based on the facts as they recruit new talent.

"A key to workforce retention requires well-trained supervisors," said Lauren Leighton, Keystone Foods' director of global talent and communications. She began with an eye-opening revelation from a 2015 Gallup report that found that about half of the 7,200 adults surveyed had left a job at some point "to get away from their immediate manager." She said that "front-line supervisors can positively or negatively impact employees' engagement and motivation, productivity and job satisfaction, which in turn impacts product quality, efficiency and business results." Leighton shared the basics of Keystone's Excellence in Supervision program that seeks to train supervisors on how their behavior impacts the workplace, on communication skills, teamwork, diversity and coaching. Referring to the old "which came first" question, she asked, "Which came first, the supervisor's success or your business's success?" Without question, she said the answer will always be the supervisor as she encouraged all attendees to focus on their supervisor training programs.

New Study Highlights Benefits of the Partnership Between Contract Farmers and Chicken Companies

April 26, 2016 from National Chicken Council

WASHINGTON, D.C. – April 26, 2016 – The National Chicken Council today released a study that presents the results of a 2015 broiler industry survey designed to capture key live chicken production statistics. In addition, the study summarizes several key trends in broiler production efficiency, returns and loan quality data.

"Viewed in totality, live chicken production is a viable, mutually beneficial and attractive farming enterprise for the vast majority of farm families who raise chickens in partnership with the companies they work with," noted agriculture economist and the study's author, Dr. Thomas Elam, president of FarmEcon LLC.

The study represents data from companies responsible for 92 percent of chicken production in the United States. A summary of the findings include:

- ♦ More than 95 percent of farmers who did not retire stayed with the same company in 2014. Of the ones that left their current contract, more than 250 farmers moved to a different company to continue raising chickens.
- ♦ Chicken farmers generally have higher incomes compared to all farms and all U.S. households, and have an age structure that is similar to all farm operators. A 2011 USDA farm financial survey shows that broiler producers generally have significantly higher incomes than all other farming enterprises and the average U.S. household.
- ♦ More than half the farmers have been with their current company for 10 years or more. Almost three-quarters have been with the same company for 5 years or more.
- ♦ Responding companies reported significant waiting lists for those who would like to enter live chicken production or expand existing operations. Companies reported that they have 1,858 applications from potential live chicken producers who would like to get into chicken production.
- ♦ SBA farm loan data show much lower loan deficiency and charge-off rates for live chicken production than all agricultural loans.
- ♦ Inflation-corrected farmer payment rates per square foot of farmer owned housing have increased over time. Farmers who furnish live chicken housing have captured this benefit of better chicken performance.
- ♦ The health and well-being of the chickens has greatly benefited from the contract farming structure. In 2014, the average on-farm livability of a flock of U.S. broiler chickens was 95.7 percent. In 1925, it was only 82 percent.

"As a famer and a businesswoman who's been raising chickens for 28 years, the current contract structure has allowed me to not only raise chickens, but raise my sons on my family farm, teach my children and grandchildren how to care for animals, and given me the ability to keep up with technology," noted Jenny Rhodes, a chicken farmer and poultry extension agent at the University of Maryland. "I've always had good relationships with the company I've contracted with, as we both have the same goal – to raise the healthiest chickens possible. Raising chickens in my family is now multi-generational – my son got into the business on his own just this year – a voluntary business arrangement with the company of his choice."

A copy of the study is available by clicking here. For more information about how and why farmers and chicken companies partner to raise chickens, visit Chicken Check In. \Box

Senate Blocks Bill to Make GMO Labeling Voluntary

On March 18, 2016, in Congressional News, Genetically Modified Foods

The U.S. Senate voted [in March] against a cloture motion to advance The Biotechnology Labeling Solutions Act, a bill that would preempt state-by-state laws mandating the labeling of foods containing genetically modified organisms (GMOs). The bill was blocked when it did not receive the 60 votes needed, instead receiving 48 "yea" and 49 "nay" votes.

The bill was introduced by Senate Agriculture Committee Chairman Pat Roberts (R-KS) in order to prevent "patchwork" labeling laws for GMOs in each state, wherein states would define how and which foods contain GMOs, and how those foods should be labeled. As an alternative, the proposed bill would construct a federal policy to disclose foods that contain genetic engineering through a variety of communication methods such as websites or smart scanning technology. The bill had previously been introduced and passed through the Senate Agriculture Committee on March 1 with no amendments.

A number of states have developed genetic engineering labeling laws, including Vermont, Connecticut, and Maine. However, Vermont is the only state that will enact its law independently on July 1 2016. Connecticut and Maine's laws may only be enacted if neighboring states adopt labeling laws. Members of the Senate remain optimistic that a compromise will be achieved prior to mandatory labeling in Vermont this summer.

(To see the complete <u>roll call for all Senate votes</u> go to <u>http://www.senate.gov/legislative/LIS/roll_call_lists/roll_call_vote_cfm.cfm?congress=114&session=2&vote=00037</u>)

Investor concerns regarding "factory farming"

Campaigns against modern livestock and poultry production methods, which activists insist on terming as "factory farming", have focused largely on trying to expose animal abuses, promoting animal-friendly legislation, and encouraging people to eat either free-range or pasture-raised products; or, to simply quit eating meat and dairy entirely.

Animal rights activists are now beginning to focus their attention on the shareholders.

Sami Grower has a recent article published in <u>Mother Nature Network</u> of interest; and, <u>Farm Animal Investment Risk & Return</u> has a 31 -page report titled <u>Factory farming the next big risk for investors</u>, which includes stats **they** feel that investors can't ignore.

FSIS poultry testing update

A May 31, 2016 article a Food Safety News article written by Coral Beach shares that according to a recent USDA update the USDA's Food Safety Inspection Service (FSIS) won't begin assessing whether poultry operations are meeting new pathogen reduction standards until July 1st. The delay is said to be necessary to allow inspectors additional time to become familiar with new instructions on sampling procedures. More than half of the chicken operations are expected to fail, at least initially, according to the federal officials.

FSIS estimates in the *Federal Register* that approximately 63 percent of raw chicken parts producing establishments, 62 percent of not-ready-to-eat (NRTE) comminuted chicken producing establishments, and 58 percent of NRTE comminuted turkey producing establish ments will not meet the new *Salmonella* standards.

Antibiotic use in the U.S. Poultry Industry

By Dr. Stephen Roney , Special to Poultry Times

ATHENS, Ga. — Antibiotics are used in food animals to treat clinical disease, to prevent and control common disease events, and to enhance animal growth. When antibiotics are used appropriately, the risk of antibiotic residues in our meat, milk or eggs is absolutely negligible. The different applications of antibiotics in food animals have been described as therapeutic use, prophylactic use, and sub-therapeutic use. Antibiotics can be used to treat a single animal or an entire flock or herd.

In the past few years, concerned groups have been critical of antibiotic use in food animals. They believe that antibiotic resistance develops when low or sub-therapeutic doses of antibiotics are routinely given to farmed livestock, a procedure we know as growth promotion. While research that clearly defends this idea is scarce, we will attempt to describe the current usage of antibiotics in poultry and examine some of the results that have been observed. Read the full article.

Promising antibiotic alternatives

May 31, 2016 information from All About Feed.net

Recently published <u>research</u> shows that antimicrobial peptides (AMPs) are promising alternatives to conventional antibiotics. These peptides have a strong potential for application as feed additives in poultry production.

Antimicrobial peptides have been demonstrated to improve growth performance, promote nutrient digestibility and gut health, positively alter intestinal microbiota, and enhance immune function in broilers. There is however a need for research evaluating the pharmacokinetics of AMPs to further understand their function. For more information go to: https://www.allaboutfeed.net/Feed-Additives/Articles/2016/5/Peptides-show-promise-for-poultry-2810636W/?cmpid=NLC|allaboutfeed_focus|2016-05-">https://www.allaboutfeed_focus|2016-05-

31|Peptides show promise for poultry

Water pressure: How does it affect broiler's consumption, performance?

Information from: Poultry Health Today

"In a controlled study at the University of Georgia, we were able to show that **during the final week of broiler production**, increased water pressure improved feed consumption, feed-conversion ratios and weight gain by 111 grams (0.24 lb.), with minimal effect on litter quality," Cody Compton Brown, a graduate research assistant, told *Poultry Health Today*. However, Brown added, increasing the water pressure can also increase litter-moisture levels, which has the potential to adversely affect paw quality.

"It's important to note that the birds don't take advantage of the extra water until the final week of production," [Dr. Brian] Fairchild said. "The difference between water usage — what goes through the water meter, and water consumption — what goes through the bird — is an important distinction."

For more information and a video clip go to http://poultryhealthtoday.com/water-pressure-drinking-water-effect-broilers-consumption-performance

Exploration of Solar Power for the Modern Poultry Farm

Dennis Brothers, Jess Campbell, Jeremiah Davis, Gene Simpson, Jim Donald

National Poultry Technology Center, May 2016

The ever-evolving modern poultry house has gained numerous energy efficiencies over the last few years. Improvements in tightening techniques & insulation technology, improvements in ventilation systems, control systems, lighting and heating – almost all areas of input costs have received much attention and have seen great improvements. Now with the current efforts in rainwater harvesting being explored and utilized on NPTC test farms, one might be tempted to say there is not much fat left to trim out of the modern poultry farm. However, solar energy can also be added to this list. We are not talking about solar heating, but actually using solar energy to generate electricity. Solar electricity is not a new idea at all. Everyone has used and benefits from photovoltaic (PV or solar cell) power generation. You probably have a calculator on your desk that uses PV cells to power it instead of batteries. The technology of converting the sun's light energy into electricity has been around for a long time and is continuing to evolve and improve. In fact, this idea is not even new to poultry housing in the southeast U.S. However, there are some common misunderstandings to how it actually works on a poultry farm. This paper is intended to help clear up some of those misunderstandings.

There are not many things in this world we can say are truly free – the sun's light energy is one of them. With the increasing cost of power being driven further and faster by the increasing bird demands, it is time poultry growers seriously consider opportunities in solar power. The problem is a system that harnesses this "free energy" is anything but free. In fact, it can be very costly, particularly if done incorrectly without full understanding of how it all works. On the other hand, if done properly with all the right supporting factors, a grower has the opportunity to lock in his future electricity costs at a constant lower rate while paying for the system. Once a system is paid for, a grower can thereafter be virtually self-sustaining in electricity well into the future with little more than the cost of insurance and maintenance for the solar system. With current electricity costs for high wind speed houses continuing to climb, this can equal a substantial boost to the grower's bottom line.

The biggest misunderstanding with solar energy in poultry operations is most think you are directly using the electricity being produced – thus allowing you to be "off the grid," totally independent of the power company. While this is technically possible to do, it is totally impractical and currently economically infeasible for a modern poultry farm. There are several reasons for this impracticality:

PV cells produce DC power. That has to be converted to AC power to be utilized in a poultry house to run motors, lights, etc. Since PV cells only produce power when the sun shines, to be totally off the grid, totally self-sufficient and apart from the power company, you would have to utilize a large array of batteries to store the power being produced by the PV cells and then convert that DC power back to AC power to use it when the sun isn't shining. You can imagine how much battery storage capacity it would take to supply a modern poultry house and the cost associated with such a storage and conversion system. It is simply uneconomical with the current best battery systems available. This may change as battery technology improves, but we are not there yet.

The current solar systems are very reliable with little maintenance required. However, the dependability of most all utility company power is also extremely good. Most all growers have back-up generator systems to cover them in the few times the utility company power fails. If a grower was using a solar system, with all its inverters, transformers, batteries, controllers, etc., for primary power, he would be relying on two complicated mechanical and electronic systems to always be working to supply power. The power companies simply do such a good job at supplying power consistently and dependably, it is impossible to replicate this peace of mind and assurance of power when you need it with any self-contained system.

For these reasons, it is just not feasible or smart in our opinion for a grower to consider any system that unplugs him from the power company. So the question is "Just how does this solar system save me money?" The short answer to the question is *NET METERING*.

WWW.POULTRYHOUSE.COM - 1

Power companies have to produce the power you purchase from them. They have to build and maintain the distribution system. And they have to anticipate and react to ever increasing demands for electricity. They do this at a very successful level and for surprisingly low cost to the end user if you consider everything that goes into your ability to plug into your wall and get power at any time. However, the increasing costs of production and increasing demands often mean ever increasing power bills, as the utility companies try to keep up with demand. Many people may not realize that utility companies are regulated by the public service commissions or legislatures of the states they do business in. This regulation controls just how much the utility companies can charge for the power they supply. That fact means that utility companies are always in search of newer, better, less expensive ways to produce and distribute electricity. Enter solar electricity production.

Solar energy has proven to be a highly efficient, low maintenance way to produce electricity. In fact many utility companies are investing in large solar production facilities, or "solar farms," to harness the sun's free energy to produce electricity. Any method of electricity production is most efficient when you can produce the electricity close to the same areas of the highest usage, thus decreasing distribution costs in the form of power lines, substations, etc. Keep this thought of producing power close to where it is used in mind as we further discuss solar and poultry farms.

If a grower is not directly using the electricity he is producing with a solar system, then just how does all this work? Simple, it is all about the power meter. We are probably all familiar with how the meter works - when you use electricity from the power company, the power meter counts those watts and adds them up overtime, turning that number into kilowatt hours (kWh) — the unit by which you get charged for electricity. Now imagine if you could turn that meter backwards. This is in essence how net metering works. There are several forms of the actual metering systems depending on the utility company in question, but the principle is the same. As the solar system produces power and feeds it into the power grid, the meter flows in the direction of the grower. When the grower uses power from the grid, the meter flows in the direction of the utility company. At the end of the month, the difference, or the *net*, is what the grower pays for, or in some cases, what the utility company pays the grower — according to who received more electricity in the month. The poultry grower's ultimate goal is to produce as much electricity and feed it back into the system as he uses off the system, thus netting out at a zero power bill. It can be pictured another way — you are selling power to the utility company at the same time you are buying power from the utility company. At the end of the month, you hope to have sold as much or more than you bought.

All power utility companies who participate in net metering have certain rules and regulations for their program. Many limit how much power you can produce by limiting the size of a system at any location. Others limit the number of kWh they will pay for. Most often they limit the kWh they will pay for to be equal or less than your annual usage averaged over time – thereby guaranteeing you can only zero out at best and not get ahead of the utility company. Many will limit the rate per kWh they pay for the power produced by solar. Some companies pay retail rates, others only wholesale. There have been times when a utility company is in an expansion mode and chose to offer incentive rates to encourage local production. Still others have purchase rates that change with seasons and usage patterns. All participating utilities will have guidelines that must be met to tie your system into their grid.

These net-metering guidelines are often regulated again by the state under formalized **net-metering laws.** These laws are set in place by state legislatures and public service commissions to assure both the power client and the utility company have the opportunity to operate profitably in this unique system. As of the writing of this newsletter, Alabama does not have a statewide net-metering law, thus it is left solely to the individual utility companies in Alabama to define if and how they will participate in any net-metering activity. Therefore, it is paramount for any grower who is considering solar energy production to find out exactly how their utility company provider operates in regards to net metering as well as how their state laws regulate the system. **Without at least a somewhat favorable net-metering opportunity, solar energy production is in no way a feasible choice for poultry growers.**

The Economics of Solar Power Generation:

The durability, weight, lifespan, and efficiency of PV cell panels are improving rapidly. These improvements are fast reducing the overall cost per watt of electricity produced to record lows – with newer technology promising to continually drive the cost lower in the near future. As new technology lowers the costs, it also shortens the payback period of a system – given that there is favorable net-metering available through the utility company. It wasn't too many years ago that solar power was costing \$6.00-7.00 per watt of installed capacity. Now that figure is \$2.25 per watt for average sized installations. Larger installations can easily see \$2.00 per watt installed cost. And the cost is projected to continue to fall over the next several years. Even at these low costs, the average 50 kilowatt system will come in at an installed cost of \$100,000 to \$115,000. That is not small change. This fact forces poultry growers who are in favorable net-metering areas to consider all the possible contributing factors such as available tax credits, other government incentives, decreased loan interest rates, depreciation opportunities and lease options.

*It is to be noted that 3rd party purchasing, with many alternative lease-back & ownership programs to the grower have been poultry grower-friendly in some areas. However, like net metering, this 3rd party purchasing is not approved in some states. Check your local utility company and/or public service commission for details.

The payback numbers for a solar system are variable depending upon the above cost factors and the cost of electricity in the area. Solar panels produce power at the rate of 1,350 kWh per year. So a 50 kW solar system will produce 67,500 kWh of electricity in a year. If you are currently paying \$0.11 per kWh to the power company, a 50 kW solar system could offset \$7,425 of your current annual power bill – assuming you currently use that much power and your utility company offers a full offset opportunity.

Considering all the numbers, the average poultry farm with favorable solar opportunities can expect a final payback period of 8-12 years on a 50 KW system. Any cost-share, tax-credits or grant monies that reduce install cost would reduce this period.

System lifespan is very good. PV panels degrade at a slow rate of 1/2 of one percent per year. This means they have a usable lifespan of 25-30 years before their efficiency drops to the point of needing replacement. Most systems will come with a 25 year warranty on the panels themselves and a 10-15 year warranty on the power inverters. It is advised that the inverters be upgraded and replaced in the same 10-15 year span (see fig 2.)

Practical engineering questions:

Insurance companies, builders, integrators and growers all have interest in how a solar system is installed on a poultry farm and what the associated risks are. First, it is absolutely imperative that any solar system be installed by a reputable, experienced solar installer. A well designed and installed system has built in safeties with regards to electrical shock risk for human injury. There are also life safety switches and controls that must be in place to assure the safety of utility workers when they are performing maintenance or repairs on their connected lines. Strict adherence to the power utility company's guidelines for life safety is required and no short cuts can be tolerated. But if a system is well designed and installed, they have proven to be safe for all parties. A properly designed system will not cause any interference with normal power supply from the utility company. If for any reason the solar system experiences problems and stops producing electricity, a properly designed system will never cause the houses to be out of power – since the houses are not directly using the solar power. The utility power source would still be available. This would also not affect the ability of the back-up generator to supply power as needed.

There are also questions concerning physically installing solar panels onto a poultry house roof (see fig 1.) This installation opportunity makes solar uniquely attractive to poultry growers as no land has to be utilized and taken out of otherwise useful production. For example, a typical 50KW solar system being installed in the southeastern US today takes up approximately 4,000 square feet of space. This is less than one half of one side of the typical poultry house roof. Solar panels in the northern hemisphere should optimally face in a southern direction to get the most of the sun's energy. With many poultry houses running east to west, this yields a convenient, optimal southern facing roof for solar panel placement. The weight of the panels themselves is minimal and should pose no risk for a poultry house with a well -designed truss system in good repair.

However, it is always advisable to have your roof/truss system inspected by a professional prior to installing a solar system. The greatest concern is in an area that experiences heavy snow or ice loads in the winter. If your houses are in such areas of the country, extra caution is needed and it is advisable that a structural engineer be consulted before installation. Caution is also necessary if your poultry houses are more than 20 years old, or have roof systems built on less than a 5"/12" pitch. In these cases, you may not have an optimal installation site on the poultry house roof.

If the poultry house roof is undesirable for mounting the panels, you can still explore a ground mounted system (see fig 3.) Ground mounted systems are often the preference of growers and installers alike. Ground mounted systems are becoming more prevalent as many poultry houses are no longer being built strictly in the east/west fashion. Ground mounted systems can sometimes be installed less expensively, but they also carry more maintenance as the surrounding area must be kept clear of weeds, are more prone to damage by debris or livestock, and some consider them an eyesore. Either system will work and produce the power it is designed for. Consider all options and choose the best for your situation.

The modern solar panel is very durable and not easily damaged. Rain, snow and hail pose little threat. However, if a panel is damaged, they are modular and capable of being replaced in single piece.

The Bottom Line:

Solar power generation is certainly not a new idea. Even so, the technology continues to improve both in efficiency and application. It is not new to commercial poultry housing either. There are currently more than 25 poultry farm solar installations going on in north Alabama alone as the economics are now beginning to become favorable to some poultry growers in some areas. As this technology goes forward and costs continue to decline, it may become a more typical sight to see a poultry farm with solar panels and growers reaping the benefits of this free resource.



Figure 1: Solar panels take up little space on an average poultry house. Here we see a 100 KW system on a 40'x500' house. The size and weight of this system pose no threat to the stability of this house. The installation design also allows for modular replacement or repair of the panels if needed. Poultry houses with southerly facing roofs are ideal mounting places for solar systems.



Figure 2: Solar systems use power inverters like the ones seen here to convert solar generated DC power to AC power capable of being fed back onto the utility company power grid.



Figure 3: Ground mounting of the solar system is also a viable option. There can be many reasons to choose a ground mounted system, including aesthetics or houses not facing in an optimal direction. These systems work the same way and typically do not cost much, if any, more than a roof mounted system.



TPA ANNUAL MEETING & SUMMER GETAWAY REGISTRATION FORM

Register online at http://www.tnpoultry.org/meeting/registrationForm.cfm



TPA is "*Up to Somethin'*" August 5-6, 2016 DoubleTree Nashville Downtown



Name		
Company		
	State Zip	
Cell PhoneEmail		
Guest Names 1)	_2)	
3)	_4)	
SPONSORSHIP, AUCTION, MEMBERSHIP	GOLF TOURNAMENT - Sat., Aug. 6 th , 8 a.m. @ Pine Creek, Mt. Juliet (Please complete a separate registration form for each golfer)	
☐ Diamond Sponsorship \$ 5000.00	11	
☐ Platinum Sponsorship \$ 2500.00	Golfer Entry @ \$ 135.00 \$ (Includes green fee, cart, breakfast, 1 mulligan, 1 red tee)	
☐ Gold Sponsorship \$ 1000.00	Golfer's T-shirt Size	
☐ Silver Sponsorship \$ 750.00	Golfer's Handicap or Average Score (required)	
☐ Bronze Sponsorship \$ 500.00	Sponsor a Golf Hole x @ \$ 100.00 \$	
☐ Auction Cash Donation☐ TPA Allied Membership Renewal\$ 500.00	<u>SPORTING CLAY SHOOT</u> - Sat., Aug. 6 th , 9 a.m. (Please complete a separate form for each shooter)	
TOTAL COMMITMENT	Shooter Entry @ \$ 130.00 \$ (Includes fees, shells, 5 extra shots, snacks, lunch)	
	Shooter's T-shirt Size	
Number planning to attend the Annual Meeting and speaker program at 1:00 PM on Friday, August 5 (No registration fee)	Gauge of shotgun you will be using (required)	
Number planning to attend the Friday evening reception @ 5:30	Sponsor a Shooting Station x@ \$ 100.00 \$	
I would like to contribute the following auction items:	<u>EXPERIENCE BELLE MEADE TOUR</u> - Sat., Aug 6th, 9 a.m 3 p.m. (Please complete a separate form for each attendee. Limited to 1st 50.)	
	Attendee Registration @ \$ 150.00 \$(Includes tour, transportation, lunch)	
I will bring the items with meI will ship the items to TPA .	Attendee's T-shirt Size	
I am donating \$to purchase auction items.	II.	
DEADLINE FOR RECISTRATION, Ind. 44, 2046	SATURDAY NIGHT DINNER AND ENTERTAINMENT August 6 th , reception begins at 5:00 p.m.	
DEADLINE FOR REGISTRATION: July 11, 2016	Dinner Tickets *Reservations required	
Register online at <u>www.tnpoultry.org</u> or	(Includes entertainment) x @ \$200.00 \$	
SEND ALL REGISTRATION FORMS & PAYMENT TO: TPA, PO Box 1525, Shelbyville, TN 37162-1525 or tracy@tnpoultry.org	CONFERENCE REGISTRATION FEE	
Please make checks payable to TPA.	Individual @ \$ 35.00 \$ Couple @ \$ 50.00 \$	
Hotel reservations may be made online at	e y 30.00 y	
http://doubletree.hilton.com/en/dt/groups/personalized, B/BNADUDT-TNP-20160803/index.jhtml	■ I	
or by calling 615-244-8200 using group code TNP.	Name on Card	
TPA special room rate available until July 13, 2016.	Credit Card #	
	CVV Exp Date Zip Code	
GRAND TOTAL from both columns	*All credit card payments will incur a 3.2% processing fee.	



Youth Art Contest Entry Rules

TPA welcomes participation in their first annual art contest for youth. All entries will be displayed & judged during the TPA Annual Meeting & Convention this August 5-6 in Nashville at the DoubleTree hotel.

Subject: All art must be poultry-related, i.e. of a chicken or chickens, and/or of a poultry live operation.

Who is eligible: Family members (children, grandchildren, nieces/nephews, step-children, etc.) of TPA grower members, TPA poultry complex employees, or affiliated TPA allied company members are eligible to submit entries. There will be three age categories: 9 and under, 10-14, 15-18 (age as of August 1, 2016).

Awards: Each group will have 1st, 2nd, and 3rd place winners that will be awarded ribbons and will be eligible to receive cash prizes of \$50, \$20 & \$10, respectively for each age division. There will also be an overall *Best of Show* entry awarded, which will subsequently be auctioned off during the TPA fundraiser on Aug. 6 in lieu of the cash prize. All proceeds from the sale of the winning art piece will be awarded to the artist as a scholarship.

Media: Will need to be submitted on 8½ by 11 inch rigid canvas, sketch or cardstock paper

- * Framed entries will not be accepted, but all entries must be suitable for framing
- * Drawings and paintings are the only types of media that can be entered; there will not be separate categories
 - Drawings include: pencil, charcoal, colored pencil, ink, markers, etc.
 - Paintings include: acrylic, oils, tempera, watercolors, etc.

Entry: All entries must be received at the TPA Office by August 1, 2016.

Mailing Address: TN Poultry Association, 1404 N Main Street, Shelbyville, TN 37160

Include: Please complete and submit the attached form to provide the artist's name, age, address, phone number, name of relative and their poultry company or farm affiliation. Artwork will not be returned unless the attached form and requested information is submitted.

Judging: All entries will be judged by a panel of industry representatives during the TPA Annual Meeting on August 5th.

Information:

- The art will stay on display through the evening TPA banquet on August 6th.
- Photo rights of all artwork become property of TPA for use on social media and for promotional efforts.
- TPA is not responsible for lost or damaged entries.
- TPA will auction off the *Best of Show* winner; it will not be returned to the artist; please allow two weeks for remaining entries and ribbons to be mailed.
- Contact TPAintern@tnpoultry.org or 931-225-1123 for more information.



TPA Art Contest Entry Form

Name:		
Age: (As of August 1, 2016)	Contact Phone Number:	
Family member's name:		
Relationship:	Home town & state:	
Employer:		
Best of Show winner will Contestants who would	vard the 1 st through 3 rd place and the Extractive a scholarship check for the sallike to have their art work returned and entries are judged should provide a contract of the sallike to have their art work returned and entries are judged should provide a contract of the sallike to have their art work returned and entries are judged should provide a contract of the sallike to have their art work returned and entries are judged should provide a contract of the sallike to have their art work returned and entries are judged should provide a contract of the sallike to have their art work returned and entries are judged should provide a contract of the sallike to have their art work returned and entries are judged should provide a contract of the sallike to have their art work returned and entries are judged should provide a contract of the sallike to have their art work returned and entries are judged should provide a contract of the sallike to have the sallike the sallike to have the sallike	e of their art piece. d have ribbons and checks
City	State	Zin Code

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

Please include this entry form along with your entry, to be received by TPA no later than August 1, 2016.

Please send all entries to:

TN Poultry Association 1404 N. Main St. Shelbyville, TN 37160















A & P Leasing, LLC Kiln-dried pine shavings Jordan Bailey (931) 738-5065

Green Earth Solar, LLC **Trevor Casey** (865) 660-5400

Quality Incentives Company Peter Krstovic 404-431-0792





Alltech, Inc. Kevin McBride (229) 225-1212 **Griffin Industries, LLC** Terry Paschall (731) 599-4816

International Paper

Silver Bullet Water Treatment Jake Smith (479) 715--9864





American Proteins, Inc. Mark Ham (770) 886-2250

Eddie Creekmore (423) 883-7003 Jeff Ewing (423) 280-2492

Smithway Inc. **Rocky Smith** (828) 628-1756



americolo.

Americold Ren Medearis (404) 402-9205 Jones-Hamilton Co. Ed Jemison (423) 400-3755 Clint Lauderdale (256) 620-1175 Southwestern Sales Co. **Ricky Gaines** (479) 366-2023





Animal Health International Jeff Sims (256) 504-2588 Larry Singleton (817) 913-3468

K Supply Co., Inc. David Walker (256) 894-0034

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





Aulick Chemical Solutions Brian Castle

Klarion Peter Bramsen (630) 517-1379 **Swallows Insurance Agency** Gabe Colwell or Greg McDonald (931) 526-4025





(859) 559-2842

Lee Energy Solutions

Wes Cumbie (334) 707-8427 **TN Farm Bureau Federation** www.tnfarmbureau.com 931-388-7872





(616) 283-4527 **Chick Master** Lou Sharp (678) 341-9047

(706) 338-8570

Big Dutchman

Jeff Ratledge

Lhoist NA Barry Collins (931) 368-9057 **Tennessee Farmers Co-op** Paul Davis (615) 793-8412





Chore-Time Poultry Brent Escoe

LiphaTech Ryan Haley (501) 691-3182 **Tennessee Solar Solutions Brandon Carter** (423) 535-9350 ext. 701





CLEAR VIEW

Clear View Enterprises

Steve Key (270) 302-8082

Live Oak Bank Jody Murphey (678) 977-4274

Thompson Gas Robby McKim (706) 455-8426 James Watson (706) 851-4378





Cumberland Poultry/Hired Hand Brian Johnson (217) 820-3530 Gary Sadler (225) 531-2461

Marel Stork Poultry Processing Dwight Curl (913) 888-9124

Tri-Form Poly (Ecodrum) Byron Irwin (701) 446-6139





D & F Equipment **Greg Cagle** 256-528-7842

Marvel Technologies, USA Jack Wheeler (615) 642-3729 Tom Ellsworth (615) 812-5175 Univar **Donnie Powers** (205) 641-1157





Elanco Animal Health Jesse Rodriguez

Merck Animal Health Paul Burke

UT - Extension Robert Burns (865) 974-7112





EnSave Amelia Gulkis (802) 434-1826

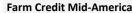
(256) 506-2623

Merial Select, Inc. Mike Johnson (678) 644-8463

(615) 804-3564

Val-Co **Brian Phillips**





Matt Neal (615) 332-4775 Meyn America, LLC

Brandon Bess (336) 214-9258

(601) 850-3844



farmcredit

Gainco, Inc. Scott Seabrook Russ Williams (770) 530-5778 Vincit Group, The Eric Killen (423) 504-1974

Weeden Environments





(404) 414-2149

Nordic Logistics & Warehousing Don Schoenl (770) 871-2821

Reggie Saucier (479) 841-8140





Goggin Warehousing Keith Bellenfant (931) 225-1206

Prime Equipment Group Alexander Libin

Zoetis Chris Dyer (770) 335-5552









(614) 633-9981



















TN Poultry Association P.O. Box 1525 Shelbyville, TN 37162 www.tnpoultry.org

Executive Director
Dale Barnett
(931) 225-1123
(931) 434-8045 mobile
dbarnett@tnpoultry.org

Member Services
Tracy Rafferty
(931) 225-1123
tracy@tnpoultry.org

Follow us @tnpoultry on Facebook and Twitter







NEWS FROM AROUND THE COMPLEXES

Aviagen – **Cory Shadden**, Aviagen's GP breeder manager in Elkmont, AL was presented the "30 under 30" leadership development award at IPPE in Atlanta this past January. Cory is directly responsible for nearly 20 employees in 70 locations of GP breeder hens in TN and AL, according to Wayne Lollar, Aviagen's Director of GP Production for AL and TN.



Hubbard, LLC recently hosted newly appointed Commissioner of Agriculture, Jai Templeton, for the Pikeville/Bledsoe Co. Farm to City breakfast on May 3rd and a visit to the hatchery. Pictured from left to right: Dale Barnett, TPA Exec. Director; **Mark Harmon**, Director of Production; **Jay Daniels**, Director of Operations; Ag Commissioner Jai Templeton;



Louis Buck, PR Director in East TN for TDA; and Jiggs Kilgore, Hatchery Manager.



Cobb-Vantress in Lafayette, TN hosted a group of folks to visit a new breeder farm that is finishing up construction and equipment installations, that will go into production later in June. Front row: Emily Buck, staff member for U.S. Congressman Diane Black, and **Randy Yates**, Complex Manager for Lafayette; Middle row: **Adam Prater**, Regional

Safety & Environmental Manager; **Craig Benich**, Complex Manager for the Dry Creek Pedigree Farm; Dr. Shawn Hawkins, UT Ag Biosystems Engineer; and Jeff Ratledge with Big Dutchman; Back row: Kai Steinman, equipment installer; **J.L. Coe**, Farm Crew Supervisor for Lafayette; and Dr. Zac Williams, TTU; Not pictured: Dale Barnett, TPA Executive Director.



Aviagen - **Dr. Kate Hayes** presented at the 65th Western Poultry Disease Conference in Vancouver, Canada in April on the topic of poultry vaccination to prevent *salmonella*. Dr. Hayes has been with Aviagen since 2007 and currently oversees the health, biosecurity and animal welfare of Aviagen NA's GGP and GP broiler breeder flocks. She manages a team of poultry veterinarians and laboratory technicians at Aviagen's NPIP-authorized veterinary laboratory in Elkmont, AL.

Page 38

