BROILER BREEDER MANAGEMENT IS NO EASY TASK

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FERTILIZED EGGS ARE THE GOAL

The main goal of broiler breeder management is producing eggs. Eggs ultimately determine the number of broiler chicks per hen housed. But the only good broiler breeder egg is a fertilized egg (McDaniel, 2011). If egg production numbers or mating activity is low, then it is likely that the number of chicks per hen housed will be less than desirable. While it is true that integrators are in the business of selling broiler meat and not eggs, you have to have a fertilized egg before you can have a broiler chick, and eventually broiler meat to sell.

Achieving a fertilized hatching egg is more difficult than you might think. The external factors that can affect egg production are numerous. Bird age, flock management practices, and specific feed ingredients, formulations, and allocations can affect the oviduct, the egg itself, and semen quality. In turn, these affect egg production numbers and reproductive efficiency. Understanding ovarian function of the chicken and its interaction with nutritional status, age, and genetic strain is critical to the production of fertile eggs with a high hatching probability (Renema et al., 2008).

The interaction between nutritional and reproductive traits is complex and constantly shifting as genetic advancements continue to be made (Renema et al., 2007). Management of modern broiler breeder strains is made more difficult because of the inability of these birds to adequately self-regulate feed intake during the growth and development stage.

FEED INTAKE

Female broiler breeders require a minimum cumulative nutrient intake before photostimulation to sustain subsequent egg production and fertility during the production cycle (Walsh and Brake, 1997). Work also suggests the same may be true for male broiler breeders to sustain subsequent reproductive performance (de Reviers and Seigneurin, 1990). Although numerous factors affect egg production and mating activity, nutrient intake is certainly high on the list and must be considered along with the underlying relationships between energy status and the physiological processes that require energy, such as maintenance, growth, and reproduction (Richards, 2010). Included in the management of broiler breeders is the strict control of feed allowance during both rearing and breeding phases to limit body weight gains and reduce the incidence of overweight birds.

Correct feed allocation and proper body weight management are essential to maximizing the potential of any breeder flock, regardless of genetic strain. Although
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controlled feeding programs prolong the time required to reach sexual maturity (Leeson and Summers, 1982), the added value associated with increased egg production, increased fertility, improved hatchability, egg quality, and reduced mortality far outweigh the delayed sexual maturity and starting of lay (Bruggeman et al., 1999). However, even with controlled feeding programs, due to the high growth potential of today’s genetic strains, it is still very easy to overfeed broiler breeders. Therefore, regular monitoring and recording of body weight and uniformity are critical management tools, especially during the period between 15 weeks of age and photostimulation.

In addition, care must be taken not to stimulate a flock with too much feed at the wrong time if it isn’t quite ready. The primary mechanism by which feed management benefits reproductive efficiency in broiler breeder females is the control of follicle development (Robinson, 2002). Pullets that enter the breeder house overweight tend to have excessive follicular development that can lead to oviductal prolapse, increased number of double-yolk eggs, egg yolk peritonitis (presence of egg yolk in the abdominal cavity), erratic oviposition (laying outside the normal laying time), and laying of more than one egg per day (often with poor quality shells (Stanley, 2003)). Overweight hens may have poor fertility due to sperm transport problems in the oviduct and from birds being too large to mate successfully.

Too much nutrient intake after peak can result in overweight birds and a faster drop in production and fertility as the birds age (Meijerhof, 2011). The rapid genetic advances in breast-meat yield and faster growth rates in broilers have placed increasing pressure on proper feed management in the breeder flock during and after peak to prevent excessively heavy birds that may lay poorly or show excessively low fertility as the flock ages. Breeder managers often struggle with when to start cutting feed back after peak, especially if the birds are still laying eggs at a high level. However, waiting too long increases the risk that birds may become overweight as egg production gradually declines in the weeks after peak.

PHOTOSTIMULATION

Nutrient intake is critical to follicle development, but just as important to breeder managers and growers is photostimulation (daylength perception). The actual age at which daylength is increased from short (8 hours) to long (≥ 11 hours) depends on the average flock body weight and flock uniformity. However, in most cases, primary breeders recommend that photostimulation not occur before 20 to 21 weeks. Flocks that are below target weight or non-uniform (CV greater than 10%) may need to delay photostimulation by a week or more. Photostimulating a flock too soon will make the feeding program even more difficult to manage and result in a sexually uneven flock. The reason for this has to do with the maturity and uniformity of the flock at photostimulation. All birds will be receiving the same feed allotment; however, sexually mature birds will have to split their feed nutrients 3 ways (some for maintenance, some for growth, and some for egg production). Conversely, because they aren’t yet laying eggs, the non-layers will only have to split their feed nutrients 2 ways (some for maintenance and the rest for growth), allowing them to divert additional nutrients to unwanted weight gain and body fat. This emphasizes the importance that reaching the desired target weight and flock uniformity at photostimulation plays in maintaining high egg numbers and fertility throughout the production cycle.

Photostimulation sets up a series of events that ultimately result in eggs. As daylength increases, the brain responds by producing hormones that, in turn, travel to the ovary where they cause follicles to develop. When the mix and amount of hormones is right, the follicle ovulates an ovum (yolk) that can then be fertilized before traveling down the oviduct where albumen and shell are formed around the yolk (Robinson, 2002; McDaniel, 2011).

For hens, the complete process of egg formation, after ovulation of the egg yolk, takes a little longer than 24 hours. You may have noticed that hens usually lay for several days in a row and then pause for a day or two. This happens because of the relationship between time of day that hormones are released and length of time (>24 hours) for an egg to form. The number of eggs a hen lays on consecutive days before pausing is called her sequence. The rate of follicle maturation and egg formation determines the sequence length; hens with slow follicle maturation and egg formation rates lay in short sequences (2 to 3 days), while hens with faster rates lay in long sequences. Sequence length changes throughout the production cycle, with the longest sequences occurring at peak production somewhere around 30 to 35 weeks of age. Compared with fully fed broiler breeder hens, hens that have their feed intake strictly controlled produce more eggs because they lay longer sequences, persist in lay longer, lay fewer abnormal eggs, and have fewer multiple ovulations in a single day (Gibson et al., 2008).

Article references available upon request
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Mississippi’s poultry industry stands to benefit greatly from the growing world population, rising third world incomes, and increasing demand for protein. We can supply that need from China to Gambia and grow our state’s income – if we can just cross the creek. Rural bridges and crumbling pavement on rural roads and state highways are beginning to hinder business.

Mississippi needs a transportation system that allows our products to get into the global stream of commerce easily, so Mississippi products go from rural to global quickly and efficiently. Chickens, pine trees, corn, and soybeans all need to move without detours from farms to processing facilities, rail lines, and ports to reach our global customer base.

In 1987, Mississippi’s Legislature raised the fuel tax and set it at 18.4 cents per gallon. That decision helped build more than 1,000 miles of four-lane highways, but it locked the gas tax to the number of gallons sold. As gasoline and diesel have increased in price, consumers and every shipper are buying more efficient vehicles that use less fuel.

The fuel tax has stagnated or declined and inflation has eaten into what a dollar will buy in every state. The 1987 fuel tax has about 9 cents of purchasing power today as the price of building a mile of road has tripled. The 1987 legislation did not account for inflation or set aside money to maintain those four-lane roads, some of which are now up to 25 years old.

Central District Transportation Commissioner Dick Hall, who was in the Legislature when the four-lane program passed, has been championing more money for maintenance for state highways. The maintenance needs also extend to city and county roads.

In November of 2012, voters in Arkansas approved a ballot initiative supported by retailers, poultry companies, and farm groups to impose a 1/2 cent sales tax for road construction. At the same time, three of 12 transportation districts in Georgia imposed an extra penny sales tax on themselves for transportation improvements. The three that approved the increase were all around the port of Savannah which is now the nation’s leading port for poultry exports.

MPA and others who depend on a good transportation system met during the 2013 legislative session with House Transportation Chairman Robert Johnson of Natchez and Senate Highways Chairman Willie Simmons of Cleveland. Simmons persuaded the Senate to form a transportation financing task force that included representatives from farm and business groups. Chairman Johnson had a hearing of his committee on December 9.

I testified to the Senate Task Force on the needs of agriculture and how deficient bridges are increasing the cost of getting raw materials off the farm and out of the forest. MPA, Farm Bureau, and the Mississippi Forestry Association asked Mississippi State University professor Dr. Scott Samson to look at where the deficient bridges were in relation to processing facilities. Deficient bridges surround grain elevators, pulp mills, and poultry complexes.

Bridges are an immediate problem, but the state’s transportation system needs to be thought of as a system and priorities set based on what boosts our economy. So, the problems with maintaining our transportation system with existing revenue are well documented. The difficulty comes in what priorities to set, and how to raise and divide the money.

Outside of these two legislative committees, other work is underway by state agencies to get more information on parts of the transportation system. The Legislature’s Performance Evaluation and Expenditure Review (PEER) Committee is looking at MDOT’s efficiency, and MDOT has hired a firm to do a comparison to other states’ departments of transportation. MDOT also has underway a study of ports and the Mississippi Development Authority is looking at railroads in the state. All of these will be finished during the 2014 legislative session. The final piece, which is a key component to my mind, is a freight study, looking at the movement of trucks.

The Senate Transportation Task Force has three hearings scheduled in December including one in Hattiesburg on December 18. Those who want to see the poultry industry remain strong and meet growing global demand need to come give their views at the Cochran Center from 6-8 p.m.

What lies ahead are some really tough decisions for all of us as a state. What do we want out of our transportation system and how do we pay for it, how much are we willing to pay and how do we decide that?

MPA will continue to lobby, as it has since 1937, for what the poultry industry needs and what grows Mississippi’s economy.
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The beautiful September sunset seen from the Barefoot’s Deck was the setting for the 76th MPA Annual Convention Platinum Sponsor Kickoff Reception. This reception was attended by 336 MPA members and friends – some old friends and some new ones.

The meeting had something for everyone, from good speakers to the sugar-white beaches and the shopping at the outlet mall. Senate Ag Committee Chairman Billy Hudson spoke to the Past Chairman of the Board Breakfast. The first convention speaker was John Starkey, President of the U.S. Poultry & Egg Association, and Hunter Lipscomb, Deputy Chief of Staff, of Congressmen Steven Palazzo presented informative topics to the attendees.

The Mississippi Poultry Foundation awards four $1,500 scholarships to grower’s children or grandchildren. During the business meetings, this year’s recipients were announced and Hillary E. Hobby, William C. Rogers, Benjamin Bishop, and Eric W. Upton were the winners.

MPA Chairman of the Board Todd Grisham presented plaques and asked each company that participated in the convention fundraiser to stand for recognition. The convention is made possible through the continued support of these members.

Chairman Grisham also introduced the 2013 MSU graduating seniors. Every year MPA invites these students to attend the meeting. This year we had an outstanding group of seniors who were very helpful and interested in meeting the people they will soon be working with. This year’s attendees were Sam Adams, Tameka Gibson, Alex Zandra Gibson, Chase McNeel, and Lynford Siebel.

The ladies gathered for the Cobb-Vantress Ladies Program featuring Howard Helmer, “The Egg Man,” for delicious omelets. Howard gave a short talk on how to make omelets and then it was time to turn the ladies loose to make their own versions. Let me tell you this was a fun time.

As always, the golf tournaments are a big hit, and this year we had 110 golfers and great prizes sponsored by Brad Martin, Vendworks, LLC, Greg McNeely, McNeely Plastics, and International Paper Company.

The Fishing Tournament boats were loaded with 59 men and women all trying to catch the biggest fish. The Vincit Group and American Packaging provided four tables loaded with outstanding prizes.

The Saturday night Live and Silent Auctions along with great food began at 6:00 p.m. and continued until every item was sold. This year, over 75 silent and live auction items were donated by the MPA friends and Allied members. Auctioneer Joe-Joe Brown does a great job and has a great time while bringing in $17,915. The beautiful handmade quilt donated by Bud Holcomb with Cobb-Vantress was raffled off for $1,425 bringing our total auction to $19,340.

The auction money is used for the Mississippi Poultry Foundation Scholarships to benefit the grower’s children and grandchildren.

Saturday night while everyone was browsing over the silent auction items, Chairman Grisham presented the Allied Industry Leader of the Year Award to Brad Martin, President of Vendworks, LLC. Brad is an outstanding member of MPA. He served as the Allied Industry Committee Chairman for 2013 and stands ready to serve MPA.

The 2013 Hall of Fame recipient is Dr. Robert Keirs. Dr. Phil Stayer and Dr. Tim Cummings did a great job presenting this award to a surprised Dr. Keirs. (See page 11.)

If you haven’t taken the time to attend the MPA Annual Convention, I hope you will join us in 2014. I hope by reading this short recap of the convention you realize what you are missing. This meeting is a mixture of just the right amount of business and pleasure.

I hope to see you in Destin, September 11, 2014, at the Hilton Sandestin.

Brad Martin, Allied Industry Leader of the Year, President of Vendworks, LLC, and Todd Grisham, MPA Chairman
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This year was the second year the Department of Poultry Science at Mississippi State University hosted the 4-H Poultry Chain Show. However, it was the first year the State Show was showcased during the Mississippi State Fair. The event was a huge success, and a lot of positive feedback was received.

If you are unfamiliar with the poultry chain, it is where participants receive 20 chicks, either Leghorns or Plymouth Rocks and raise them until sexual maturity. When participants begin the poultry chain, they complete a course on raising birds, biosecurity, and the importance of vaccinations. These participants keep a record book the entire 20 weeks that illustrates the birds feeding schedule, weight gain, vaccination schedules, biosecurity of their facilities, expenses for feed, facilities, etc., any other information they choose to add, and, of course, pictures. Once the birds are approximately 20 weeks of age, participants select their top six birds, based on size, maturity, and uniformity and show them at a county show. The county grand champion and reserve champion advance to a state show which was held this year on October 12 at the State Fair. At both county and state levels, the record books and a face-to-face Q&A with each participant ensure that the 4-H’ers themselves, and not their parents, have actually gained proficiency in biosecurity and bird husbandry.

The poultry chain was expanded this year with two categories (Layer and Meat) compared to last year’s single category. Participants were also able to select different types of leghorns for the layer category and different types of Plymouth Rocks for the meat category. We also allowed clover-buds (age 5-8) to show at the county level. This made the chain project substantially larger than it was the year before with nearly 150 participants competing at the county level and 57 at the State Poultry Show during the State Fair in Jackson. After participants were judged on their record book and birds, we awarded State Grand Champions, Reserve Champions, and 1st-5th places for each category, layer, and meat, and at each age level, junior and senior.

Immediately following the show, a live auction was held and all money bid on each lot of birds went to the respective participants as a well-earned reward for their hard work. Mr. Tony McDaniel of Florence graciously donated his time to serve as auctioneer. Counting both auction proceeds and prize awards, a total of $14,480.00 was received by participants. The prize awards and auction proceeds were donated by Companies and Individuals, as follows:

**AWARDS**

- Mississippi Poultry Foundation $2,500
- Allied Industry Committee of the MPA $2,500
- Mississippi Farm Bureau Federation $500
- Mississippi Farm Bureau Insurance $500

*The remainder of awards were provided by the Department of Poultry Science.*

**AUCTION PROCEEDS**

- Sanderson Farms $2,330
- Cal-Maine $1,365
- Jimmy Sullivan $605
- Ellis Communications $535
- Mark Leggett $175

Because the event was such a huge success with such positive feedback, we are expecting even more support as well as a larger number of participants next year. This success would not have been possible without donor support, as well as all of the hard work from the department, extension agents, parents, and participants. We look forward to next year with a bigger and even better Chain Project.
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The Mississippi Poultry Association is proud to announce that Dr. Robert W. Keirs is the 2013 inductee into the Mississippi Poultry Association's Hall of Fame. Dr. Keirs was born on January 26, 1926. He bravely served our nation from 1942 to 1948 in the United States Navy Submarine Service as a Chief Petty Officer. He participated in eight War Patrols and received personal commendations from Admiral Chester Nimitz and General Douglas McArthur.

Dr. Keirs earned his Doctorate in Veterinary Medicine from Iowa State University in 1955. He has had an illustrious and successful career that has focused on providing his expertise and knowledge in settings such as private practice, corporate, consulting, and education. In 1981, Dr. Keirs became an Associate Professor at the College of Veterinary Medicine at Mississippi State University. He immediately embraced the pleasures and responsibilities of an educator. Incorporating his private practice, corporate and consulting experience, Dr. Keirs was able to thoroughly educate his students in addressing and solving the poultry industry's needs.

Not only did Dr. Keirs enjoy teaching, but he took a strong interest in researching. Throughout his career as an Associate Professor of Veterinary Medicine, Dr. Keirs was awarded over $537,000 to conduct research. He was published ten times, wrote 57 technical reports, presented his research and findings 61 times throughout the country, and presented at 16 different workshops throughout the Southeast.

We are all proud and honored to have Dr. Keirs inducted into the Mississippi Poultry Hall of Fame. The poultry industry in Mississippi is highly indebted to Dr. Keirs for his tireless efforts in helping the industry in Mississippi and the world by furthering the understanding of poultry. Thank you, Dr. Keirs, for your research and educating so many leading poultry veterinarians.
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Bob Billingsley, director of development and engineering for Sanderson Farms, Inc, headquartered in Laurel, will take over January 1 as the chairman of the Mississippi Poultry Association.

Steve McLaurin, live operations manager, Peco Foods, Sebasteopol Division will become vice chairman. Billingsley replaces Todd Grisham, Southern Division Live Production Manager, Marshall Durbin Companies. Grisham, who works in Waynesboro and lives in Petal, becomes past chairman.

Billingsley is a graduate of Picayune High School and Delta State University where he received an accounting degree in 1983 and a Masters of Business Administration in 1984. Upon graduation from college, he joined Sanderson Farms. Billingsley served as chairman of the Mississippi Poultry Association in 2008 and currently serves on its Board of Directors. He received the 2012 Robert E. Gaddis education award and was the 2011 Jones County School District Parent. He serves on the Governor’s Mississippi Energy Policy Institute. He has served as President of the Laurel/Jones County Dixie Youth Baseball Association and on the Board of the Salvation Army. In addition, he was recently selected to serve on the U.S. Poultry & Egg Association Board of Directors.

Bob and his wife Nancy have been married for 26 years and have a 19-year-old son, Steven. They are members of First Baptist Church of Laurel.

Other members of the MPA Executive Committee include Treasurer Sam LeNarz of Petal, complex manager for Wayne Farms, LLC in Laurel; Ray Ables, live complex manager for Tyson Foods in Forest; Dr. Ryn Divine, director of food safety for Cal-Maine Foods, Inc. in Jackson; and Danny Thornton of Carthage, a Peco grower in Carthage who is a retired Mississippi State University professor.

The Mississippi Poultry Association, formed in 1937, represents the state’s largest agricultural industry. More than 55,000 people are directly or indirectly employed in poultry production on 1,800 farms, two dozen processing plants, and numerous other support companies. Mississippi ranks fifth nationally in poultry production.
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The Mississippi Poultry Association stepped up its holiday season donation to the governor in 2013, providing 40,000 pounds of broiler meat and 10,800 eggs to Governor Phil Bryant on November 26, and he directed the donation to the Salvation Army in Jackson. This was the third year that MPA broiler and egg companies made a donation to the Governor to direct to a charity of his choice. The first year of donations, MPA donated 10,000 pounds of meat and 10,000 eggs to Governor Haley Barbour who chose the Mississippi Food Network.

The Salvation Army will directly distribute portions of the donation to the people they serve and will work with other charitable organizations to spread the donation throughout communities.
John Bower, President, TRINICO AG, INC. has announced that Poultry Guard® Litter Amendment is now being produced at our new production facility in Brookhaven, MS. Poultry Guard is manufactured at this location under a contract with M&M Milling Co. The new plant will manufacture Poultry Guard in bags and 1 ton super sacks along with other new products developed by Trinico for poultry and animal agriculture. The new plant has the capability of rail and truck shipments and is set up for growers to pick up Poultry Guard in 1 ton lots. Poultry Guard is now produced in Valdosta, GA and Brookhaven, MS to better serve the poultry industry.
The Mississippi Poultry Association’s Education and Research Committee hosted this year’s Fall Seminars in October. The meetings took place in Hattiesburg (Oct. 1), Mendenhall (Oct. 2), and Philadelphia (Oct. 3). The meetings were free to all MPA integrators, growers, and allied members. Each meeting had a large turnout of growers and service technicians representing all of MPA’s broiler integrators: Marshall Durbin, Peco, Sanderson, Tyson, and Wayne. Dinner, along with door prizes (Primos Trail Cams, Bass Pro, and Home Depot gift cards), were given out at each location.

The meetings were focused on assisting growers and service technicians on a range of current issues that growers and service technicians address on a routine basis. The topics that were discussed were: Winter Time Chicken House Ventilation – Dr. Jody Purswell (USDA-ARS), Drinker Line Sanitation – Dr. Susan Watkins (University of Arkansas), Paw Scores and Broiler Mobility – Dr. Tom Tabler (MSU), Mortality Options – Dr. Jeremiah Davis (MSU), and Litter Treatment – Dr. Pat Welch. Speakers from the Natural Resources Conservation Service were planned to speak on the importance of Nutrient Management Plans and assisting growers with the application process, however, with the Federal government shutdown, they were unable to attend.

To help make these seminars possible, BankPlus, Cumberland/Hired Hand, Deep South Poultry, Georgia Poultry, Hydro Systems, Southern Ag Credit, Taylorsville Poultry, and Weeden Environments provided essential sponsorships.

A special thanks to all of our speakers who generously provided their knowledge and time and to Dr. Phil Stayer of Sanderson Farms, Steve McLaurin of Peco, and Dr. Sue Anne Hubbard of the Mississippi State Diagnostics Laboratory for providing their leadership in organizing the seminars.
Each year USPOULTRY provides significant grants to poultry science departments throughout the country for student recruitment and retention. These funds play a vital role in helping Mississippi State and other universities attract bright and passionate students to the poultry industry. Mississippi State and MPA are appreciative of USPOULTRY’s generosity and support!

(R-L) Mark Leggett, Chase McNeil (student), Dr. Mary Beck, Sherman Miller, Alex Hamilton (student), Ben Sellers (student).

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External parasites of poultry have long plagued the poultry industry. Most poultry producers have had to deal with darkling beetles or fowl mites while growing chickens. However, in most recent years our broiler breeder producers have had to deal with a “new” external parasite, the bed bug. The bed bug is anything but new to the United States, but it is relatively new to commercial poultry operations, at least in Mississippi. These pests had mostly disappeared in most developed countries until the 1980s. Since then there has been a dramatic increase in the number of reports of bed bug infestations in hotel rooms, apartments, and homes.

The bed bug (Cimex lectularius) is a small, flat-bodied insect that has been described by some poultry producers as looking like ticks. However, unlike ticks they do not remain on the bird after feeding, but they are blood suckers. Egg production will decrease dramatically in heavy infestations due to the anemia and stress caused by biting bed bugs. The biting bugs typically feed while the birds are trying to rest at night. They typically hide under the slats and nest boxes during the day and feed at night. Bed bugs seem to have adapted well to our commercial breeder houses. With all of its nest boxes and slats for them to hide and the endless supply of food, the broiler breeder house is the ideal environment for bed bugs to thrive.

No one has been able to explain why bed bugs have reappeared in the United States. Their reemergence has long been blamed on international travel, hitching rides on people and their luggage. They are resilient pests that can survive for months to a year without feeding. However, bed bugs have increasingly become resistant to commonly used insecticides which also help them maintain their existence.

The first line of defense against bed bugs is early detection. It is much easier to get these pests under control if you are dealing with smaller numbers. A single female will lay anywhere from 300 to 500 eggs in her lifetime, so they can multiply very quickly. Make sure you periodically look under nest tops and steps. These are areas they tend to hide. You may even occasionally go into your chicken houses late at night when they come out to feed. Using a flashlight, you should be able to see their movement and reddish color illuminate.

Once you know you have bed bugs, you must try and break the life cycle. Many of the chemical insecticides available work well, but the problem is they are only killing the adults they come in contact with and do nothing to destroy the eggs. It is almost humanly impossible to make sure a chemical can permeate every crack and crevice where they may be hiding, and since they can go months without feeding and still survive, continuous treatments are necessary. Proper application of the product is imperative. If birds are present, this may limit you on the type of chemical insecticide you choose. You must make your best attempt at full coverage of all hiding places. Make sure you follow all label directions and warnings when using any chemical. When birds are not present, heat can also kill bed bugs and their eggs. Unfortunately, without supplemental heat, you may not be able to reach temperatures within a chicken house or work room to destroy them. Sustainable heat at 130°F for several hours is necessary to kill bed bugs and their eggs. Depending on the time of year, you may take advantage of our Mississippi hot summers to help maintain high temperatures during your layout.

Above all, use good biosecurity techniques to avoid infesting your vehicle or home. When we think of biosecurity we typically think of keeping diseases out of our operations. But in the case of bed bugs, biosecurity is very important in making sure you do not infest your home. Do not bring anything into the chicken house or work room that you plan to bring back home, i.e. purses, lunch boxes, etc. Dedicated work clothes for the chicken houses are ideal. Remember, heat will kill bed bugs and their eggs, so place your clothing into a dryer on high heat to help control transfer of pests to your home. When leaving the chicken house inspect your clothing thoroughly to make sure you do not see any visible bed bugs.

The poultry veterinarians at the Mississippi State University College of Veterinary Medicine Poultry Research & Diagnostic Laboratory in Pearl, MS, and the MSU Department of Biochemistry, Molecular Biology, Entomology, and Plant Pathology are continuously looking for interventions to eliminate bed bugs on poultry farms. If you suspect you may have bed bugs, please have your service technician contact us, and we will be glad to try and help.
A VICTORY FOR FARMERS

On October 23, 2013, the U.S. District Court for the Northern District of West Virginia has ruled in favor of Lois Alt in her lawsuit against the U.S. Environmental Protection Agency (EPA). Alt filed suit against EPA in June 2012 after the agency claimed that under the Clean Water Act (CWA), a National Pollutant Discharge Elimination System (NPDES) permit was required for stormwater runoff from her farm because it came into contact with dust, feathers or bits of manure on the ground. Alt was threatened by EPA with fines of up to $37,500 per day if she did not obtain a permit. The West Virginia Bureau and the American Bureau Federation were granted intervenor status in the case.

In the decision by the court to grant summary judgment in favor of Alt, Judge Preston Bailey wrote that “[t]his court declares that the litter and manure which is washed from the Alt farmyard to navigable waters by a precipitation event is an agricultural stormwater discharge and therefore not a point source discharge, thereby rendering it exempt from the NPDES permit requirement for the Clean Water Act.” This decision by the court that CWA permits are not required solely on the basis of dust, feathers, and chicken litter from poultry barns that are washed from a farmyard to river and streams by rainfall is a victory for farmers with broad implications for production agriculture. The decision is also one more setback for EPA’s consistent efforts to require Concentrated Animal Feeding Operations (CAFOs) to obtain NPDES permits despite the absence of discharges of pollutants from poultry farms into navigable waters.

MOVING IN THE RIGHT DIRECTION - EPA APPEALS COURT ORDER REQUIRING NECESSITY DETERMINATION

On November 18, 2013, the EPA filed notice that it will appeal a ruling by Judge Zainey in the U.S. District Court for the Eastern District of Louisiana requiring EPA to take a definitive stand on whether states’ current nutrient policies are adequate to address water quality impairment in the Mississippi River Basin (MRB) and the Gulf of Mexico (GOM).

Gulf Restoration Network v. Jackson, deals with EPA’s response to environmentalists’ 2008 petition (“Petition”) requesting that the agency use its authority under the CWA to force states to adopt strict numeric nutrient criteria (NNC) and develop pollution load limits, known as total maximum daily loads (TMDLs), in order to combat the GOM hypoxic “dead zone.” In 2011, EPA denied the environmentalists’ Petition, but declined to state “definitively” whether new federal NNC controls were necessary to reduce pollution in the MRB and the GOM.

On September 20, 2013, Judge Zainey remanded the matter to EPA stating that “EPA could not simply decline to make a necessity determination in response to Plaintiffs’ petition for rulemaking.” Basing his ruling in part on the Supreme Court’s reasoning in the 2009 ruling in Massachusetts v. EPA, Judge Zainey stated that EPA must make a necessity determination to this petition just as the Supreme Court required EPA to respond definitively to a Clean Air Act (CAA) petition seeking regulation of greenhouse gases (GHGs). Judge Zainey reasoned that “just as EPA’s response to the rulemaking petition in Massachusetts v. EPA was contrary to law because EPA did not make a ‘judgment,’ the Denial (of the Petition) was contrary to law because EPA did not make a necessity determination.”

In its appeal, EPA will argue that Section 303(c)(4)(B) does not create the kinds of obligations contained in CAA Section 202(a)(1), the section at the heart of the dispute in Massachusetts. While the CAA section in Massachusetts identifies factors to be used by the agency in deciding whether to exercise its discretion, the CWA section cited in GRN v. Jackson contains no such factors. The CWA requires EPA to issue a new or revised water quality standard “in any case where the Administrator determines that a revised or new standard is necessary to meet the requirements.” The EPA Administrator has made no such determination and the CWA contains no standards for the agency or federal courts to apply for such a determination. The EPA’s position remains that “the CWA is by design a states-in-the-first-instance regulatory scheme” and that state agencies, like the Mississippi Department of Environmental Quality (MDEQ), should continue to consider whether to promulgate and implement state specific NNCs, not EPA.
The Mississippi Department of Environmental Quality is working to prepare a new general dry litter poultry permit by January 31, 2014, the date the current permit expires. Since the nutrient management plan growers receive from the Natural Resources Conservation Service is the first step in securing coverage under the poultry permit, Tracy Tomkins, chief of the DEQ agricultural permitting division, recommends that growers begin gathering the information to get their nutrient management plans up to date. Both the nutrient management plan and the permit expire five years after they were issued, but they may different expiration dates.

MPA has met with Tomkins and other DEQ officials to make suggestions to streamline the record-keeping under the new permit.

When the new dry litter poultry permit is issued, MPA will schedule grower meetings to provide information on what has changed and what steps growers need to take to stay in compliance.

MS POULTRY ASSOCIATION SCHOLARSHIP

The Mississippi Poultry Foundation Board of Trustees, through the scholarship selection committee, will be awarding four 2014 scholarships to students who are either pursuing careers in the poultry industry or to those whose families are grower members of the Mississippi Poultry Association. The scholarships will be awarded to deserving applicants. Children and grandchildren of MPA members are eligible to apply for the four scholarships.

If you have a child or grandchild who is a high school senior or a student in a Mississippi university or community college, urge them to print and fill out an application at www.mspoultry.org. Once the application is completed, please mail it back to our office. Please address the envelope to: Mississippi Poultry Foundation, 110 Airport Road South, Suite C, Pearl, MS 39208.

Applications will be graded based on grade point average, an essay, community involvement, knowledge of the poultry industry, and references. It is also very important that applicants completely fill out the application, include all necessary attachments and supporting documents, and follow all instructions.

The deadline for applications has been set for February 28, 2014, to ensure that the scholarship can be announced in time for the high school class of 2014 graduation ceremonies.
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**UPCOMING EVENTS**

**Merry Christmas!**

**JANUARY 7, 2014**
Legislative Session starts

**JANUARY 31, 2014**
Dry Litter Poultry General Permit expires

**FEBRUARY 28, 2014**
Scholarship application deadline

**APRIL 10, 2014**
Raleigh Beef and Poultry Expo

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Todd Grisham, Chairman

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Danny Thornton, Grower Advisory Committee Chairman

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