February *Wintertime!* 2024

UNIVERSITY OF MARYLAND EXTENSION

Commercial Poultry News

In This Issue:

2024 POULTRY GROWER EXPO

April 3, 2024 - 9:00 am - 2:00 pm

Princess Anne, Maryland

This year's Farm Field Day will be held '*inside*' at the Somerset County Civic Center in Princess Anne, Maryland (Crisfield Lane, Princess Anne, MD 21853).

We would like to encourage our Delmarva growers and friends to come out and spend the day learning, networking, and enjoying (a free) lunch together.

There will be a tradeshow and educational sessions, including generator maintenance, controller training, energy savings, summer readiness and more. NM credits available.

So we know how many growers to expect and have lunch for, please register here: https://bit.ly/42vnpyj or email soscar@umd.edu or you can call Sheila at 410-742-1178 x301. For Sponsorship Opportunities, http://tinyurl.com/2024growerexpo

Nutrient Management Updates and Reminders

Worcester County Agriculture Newsletter, M. Perdue

Harvest for 2023 has come to a close and we are moving into bookkeeping, reporting, and training season. One of these winter activities will be reviewing and updating your nutrient management plan. A key component of a nutrient management plan is a soil test within the past three years. Soil tests provide an analysis of nutrients, pH, and other qualities of soil important for planning and crop productivity and are the foundation of a nutrient management plan.

University of Maryland (UMD) Extension provides guiding documents related to proper soil testing and analysis.

Soil samples provide information about a location's fertility status, including pH, organic matter content, and availability of nutrients. Nutrient management recommendations are only as good as the soil test. Therefore, proper soil sampling techniques are essential to collect representative soil samples based on field management.

Soil samples should be collected at least once every three years. Consider taking soil samples at the same time each year to reduce seasonal effects, do not take samples within a minimum of six weeks from a fertilizer or lime application, and do not take wet samples.

Nutrient Management Updates and Reminders continued...

Taking soil samples is best done with a soil probe. Probes are available at your county Extension office for use. A minimum of 15-20 cores should be taken within a sampling area. Cores can be transferred to a clean bucket, mixed up, and then approximately two cups of soil selected to submit to the lab. More information on soil testing can be found at: https://go.umd.edu/FS-1184

UMD Extension has a few updates about the Agricultural Nutrient Management Program (ANMP). Nutrient voucher trainings have been planned and are available throughout the state. If you apply nutrients on 10 or more acres and are not a certified operator, the State of Maryland requires a nutrient voucher every three years. For more information on training dates visit the website at https://go.umd.edu/ANMP-Meetings. Each county has an ANMP contact, and those requiring assistance in developing their nutrient management plan are encouraged to reach out. Soil tests and other plan requirements are necessary before a plan can be completed.

MDA has decided they will be writing all of the no-land plans. If you have questions or need a new no-land plan, contact STEVE SPEILMAN, Agricultural Resource Conservation Specialist, Talbot SCD, 410-822-1577 x3, steven.spielman@maryland.gov

There are five Nutrient Management Advisor positions open across the state. Nutrient Management Advisors play a crucial role in helping Maryland farmers develop and implement nutrient management plans. These UMD Extension job openings are in Caroline, Montgomery, Wicomico/Worcester, and Washington Counties, and a Statewide position. To apply or learn more, please visit https://ejobs.umd.edu/postings/115994.

2023 Annual Implementation Reports (AIRs) Due by March 1, 2024

Nutrient Management Annual Implementation Report (AIR) for CAFO and MAFO Operations documenting nutrient applications for calendar year 2023 are due to the Nutrient Management Program by March 1, 2024

CAFO no-land poultry operations that export manure are required to include a copy of their manure analysis. Farmers may be able to obtain an analysis from the farmer or broker who received their manure. If this is not available, they will have to submit a manure sample to a laboratory in order to get an analysis to send in with the AIR. The cost of an analysis ranges from $25 to $45 for most laboratories. Providing an email and payment with the sample may shorten the time it takes to receive the analysis. If you need assistance locating a laboratory, instructions on taking a sample and/or sampling supplies, contact your county agriculture agent or county extension office. Some offices may offer manure testing kits.
Farmers have two reporting options:

1. NEW: Farmers who want to submit their 2023 AIRs electronically should visit the **Maryland OneStop Portal**.
2. Farmers who want to submit paper reports may download either the standard AIR or the CAFO reporting form to their devices before completing.
   - **Instructions for Completing the 2023 AIR**
   - **2023 AIR Form** *(Please print out this form and complete using a pen.)*
   - **2023 CAFO Form** *(Please print out this form and complete using a pen.)*

*In **Delaware**, March 1, 2024, is the same due date. For fillable forms for Delaware, go to: https://agriculture.delaware.gov/nutrient-management/annual-reporting/*
*And in **Virginia**: https://www.dcr.virginia.gov/soil-and-water/nutmgt*

Maryland Climate-Smart Agriculture Project: Have Your Say!

Join The Conversation!

Are you seeing the impacts of more extreme weather patterns on agriculture operations in Maryland? A new survey released by the Hughes Center in support of the Maryland Climate-Smart Agriculture Project (MDCSA) aims to capture this information and more.

If you are a Maryland farmer, waterman, shell stock producer, technical service provider or Extension agent, we invite you to participate in the survey.

The Maryland Climate-Smart Agriculture Project (MDCSA) is farmer-focused, bringing together producers, technical service providers, researchers, organizations, and policymakers to develop and share science-based strategies and techniques. The MDCSA aims to ensure that Maryland farms and farmers can adapt to changing conditions and remain resilient and profitable in the future as it continues to see increased weather-related impacts from factors like heavy rains, extended dry periods and extreme temperature shifts.

MDCSA is coordinated by the University of Maryland's Harry R. Hughes Center for Agro-Ecology, located at the Wye Research and Education Center. Project Coordinator, Terry Nuwer, will connect with agricultural stakeholders throughout Maryland with a survey at grower meetings and trade shows to gain their input regarding their on-farm observations related to changing weather and environmental conditions.

Your input as a farmer, waterman, shell stock producer, technical service provider, Extension agent, value chain partner, or part of a trade organization in this survey is needed. Whether the farm is above or below water, under covering or out in the soil, in a mountain forest or the coastal plains, a six-house broiler farm or an equine operation, each voice matters. Producers are encouraged to pose questions, suggest ideas for research and farm demonstrations, and identify their decision-making process for adopting new practices for their operations.

The survey will be available electronically or in person, on paper and tablet. You can access the survey HERE, but you can contact Terry Nuwer at tnuwer@umd.edu for a print-ready copy. **Taking the survey enters you into a giveaway for a chance to win one of ten $100 Amazon gift cards (Deadline is March 31, 2024).**

Work To Date: The project's research team - comprising of a dozen Maryland scientists working in the climate science and agriculture space - is simultaneously examining current climate research pertaining to Maryland agriculture. They will identify gaps in our knowledge along with their development of climate models and simulations with a resolution to the county level and projections of climate-related impacts on farming practices, pest and pathogen management, environmental justice, agricultural markets, and other factors. Your input will play a key role in identifying these knowledge gaps.

The project is guided by a leadership team composed of farmers, academics, government, NGO representatives, and value chain partners. When our final report is submitted to the Maryland legislature in June of 2024, our goal is that producers and researchers will continue to exchange information and best management practices with organizations and decision-makers to craft solutions to a sustainable and healthy future for the Maryland farmers and farms along with a healthy Chesapeake Bay.

Are you interested in being part of the conversation? Sign up for emails with surveys and the latest research, and provide your comments at lp.constantcontactpages.com/su/iDPyA50. **TAKE OUR SURVEY**

To learn more about the Maryland Climate-Smart Ag Project, visit go.umd.edu/MDClimateSmartAg or find us on Facebook at www.facebook.com/HughesCenterAgroEcology. You can also Contact Project Coordinator Terry Nuwer at tnuwer@umd.edu or 410-827-6202, ext. 8.

For Biosecurity, Keep Doors Closed

by Sean Clougherty, Delmarva Farmer, November 3, 2023

Leaving end doors open between flocks only invites curious wildlife, and whatever pathogens that may be carrying with them into the house, poultry specialists say. "It's become less common but we're still seeing it a lot," said Jon Moyle, Extension poultry specialist for the University of Maryland. (Photo courtesy Flickr/University of Alabama)

Jon Moyle, Extension Poultry Specialist for the University of Maryland, shares a photo during recent presentations at poultry meetings. It's a picturesque, well-kept poultry farm in front of the evening colors of the setting sun.

But there's one problem: All the houses' end doors are open.

Left unattended, when houses are between flocks, Moyle said the open doors invite curious wildlife, and whatever pathogens they may be carrying, into the house.

Moyle said he's seen wildlife such as raccoons, vultures and eagles, walk into houses through unattended open end doors. "It's become less common but we're still seeing it a lot," he said. "With biosecurity so high, you want to do everything you can to prevent anything from coming in that shouldn't be."

The issue has come up a few times in recent presentations from specialists who all say the better option is to keep the doors closed and run minimum ventilation to remove excess ammonia, and some moisture, but most importantly, keep wildlife out.

Moyle said the practice of leaving the doors open goes back to a time when sidewall curtains were widely used in housing and after birds were taken out, growers dropped the curtains and opened the doors to "air out the house."

With curtains phased out, Moyle said the only way to get any benefit from leaving the end doors open would be if the wind blew directly through the house.

"Even then, it's minimal. They're better off shutting the doors and running minimum ventilation," he said. For longer layouts, Moyle said periodical venting, not running continuous will keep ammonia from building up again after an initial ventilation.

Growers typically ventilate again ahead of setting up houses for the next flock as well, he added.

Moyle added on sunny days, using minimum ventilation with open attic vents to draw in warmer air radiating from the exterior roof can help, too, without the risk of wildlife entering.

Moyle said he's seen a difference of 40 degrees between roof temperatures and the air at ground level. "It's a great time for attic vents," he said.

Electricity use is minimal too, Moyle said, costing a few dollars a day to run what is turned on via minimum ventilation.

"You just need something to keep the air moving," he said. "I know it's a pain in the butt, but unless you're working in there, there's no reason to have them open."

Can Music Improve Bird Performance?

Jennifer Timmons, Associate Professor, University of Maryland Eastern Shore

In humans, research suggest that music can reduce anxiety, blood pressure, and pain, improve memory and sleep quality as well as enhance athletic performance.

This raises the question if music could also be beneficial to animals.

As animal welfare continues to be a priority for producers, music may be an additional enrichment tool used to decrease stress and strengthen natural behaviors of birds.

Chicks start to develop hearing when they are developing embryos in the egg. Research suggest that chicks respond to external sounds at around 16-18 days of incubation.

After hatch, chicks will first hear low frequency sounds. It was reported that sudden, and high frequency noise is perceived as the most stressful for chickens.

One study reported that after seven days of exposure to loud sounds (5 minute noise, 10 minute no noise), broiler chickens had 6% less weight gain compared to the control birds.

There are few studies investigating the impact of music on bird welfare and performance.

One of the earliest studies evaluated the effects of two types of music played at two levels of intensity on broiler performance. In this study, birds were exposed to an ambient noise which consisted mainly of chicken noises, high level dinner music, low level dinner music, low level rock and roll, and high level rock and roll music.

Music was played continuously for 12 hours a day (during the daylight hours). The birds were exposed to the music treatments from 8-63 days of age.

The researchers reported no differences in body weight, feed consumption or yield between the five music treatments. The researchers also observed that the birds were frightened by the initial exposure to the music, however adapted after the first week.

In contrast, a study with quails reported an increase in egg production and improved feed conversion ratio of quail exposed to music 12 hours a day.

A more recent study with broiler chickens evaluated behavior and leg health of birds exposed to music.

Starting at 2 weeks of age, a classical music soundtrack was played five times a day for a six minute duration. The researchers reported that birds exposed to music had betters gait scores at 35 days of age compared to the control birds.

In addition, birds exposed to the music treatment were observed to have more birds eating at 35 days of age compared to the eating behavior of the control birds.

Music did not appear to influence the stress behaviors of the birds.

Currently there are very few studies evaluating the impact of music on broiler chickens, and those few studies that have been conducted report conflicting results. The specific music genre, volume, duration of exposure are a few factors that may impact how the birds respond to the music.

Studies with people have reported positive effects of relaxing music while also show the benefits of silence. Therefore when exposing animals to music it would be a good practice to provide the animals with breaks from the music.

The use of music may have the potential to improve bird performance and reduce stress; however more studies are needed to confirm if there are any real benefits.

("Previously published in The Mid-Atlantic Poultry Farmer, November 2023")

Calendar of Events 2024

- February 28: Farm Family Communications and Estate Planning Workshop
- March 6: Dr. Dan Bautista presents 'Poultry Diseases 2.0'
- April 3: 2024 Poultry Grower Expo!
- May 1: Insurance with Shane Kunkleman (Georgetown)
- May 15: Poultry Farm Management for Existing, New & Potential Growers (Georgetown)
- May 22: Poultry Farm Management for Existing, New & Potential Growers (Snow Hill)
- May 29: IMP and Pollinator Day (Salisbury)
- June 5: DCA Booster Banquet (Harrington)

Everyone is welcome! For more information, go to the Maryland Poultry website at extension.umd.edu/poultry

Learn Latest Money Saving Tips for Your Farm

April 3, 2024 | 9 AM - 2 PM

Somerset County Civic Center, Crisfield Lane, Princess Anne, MD

This event will include a tradeshow and educational sessions throughout the day, including generator maintenance, controller training, energy savings, summer readiness and more.

Come! Enjoy a free lunch and fellowship

Nutrient Management Credits Offered

Registration to attend: *https://bit.ly/42vnpyj*

For Sponsorship Opportunities: *http://tinyurl.com/2024growerexpo*

For More Information: extension.umd.edu/poultry

Biosecurity is essential! Remember to wear non-on-farm footwear to the Expo

University of Maryland Extension | AgFS Agriculture & Food Systems | University of Delaware Cooperative Extension | University of Maryland Eastern Shore | Delmarva Chicken Association Est. 1948