UNIVERSITY OF MARYLAND EXTENSION

Farm News

Winter 2025 **February**

Inside this issue:

UME St. Mary's County
26737 Radio Station Way, Suite E-2
Leonardtown, MD 20650
TE: 301-475-4484

Time to find your ice skates and insulated underwear. The region finally experienced an extended cold snap during late January with minimum temperatures reaching down to 6° F. No one enjoys the cold toes, frozen water lines, and the increase use of electricity and firewood that comes will below normal winter temperatures, however, there is good news. I'm hopeful the cold weather has increased the mortality of some insects and diseases that we have struggled with the last couple of years, including overwintering aphids, thrips and slugs. If you have high tunnels, open them up to get temperatures down. House plants can go back in the house. The cold weather even came with some snow and we need it. Precipitation levels are still off several inches due to last year's drought.

Highly pathogenic avian influenza (HPAI) continues to be a concern in Maryland. As of February 5th, the Maryland Department of Agriculture has confirmed the presence on HPAI on 5 commercial poultry farms on the Eastern Shore and 1 backyard flock in Montgomery County. In addition, 2 commercial flocks in Delaware and 1 commercial flock on the Eastern Shore of Virginia have confirmed cases of HPAI. Pennsylvania has confirmed one case of HPAI on a commercial layer flock. All affected flocks have been depopulated. From a local perspective, many of our small layer operations in So MD have had difficulty ordering replacement layers for this spring. Egg prices continue to increase in our area with supermarket prices approaching $5 a dozen. I encourage all poultry growers in the region to practice heightened biosecurity and notify MDA if you notice any signs of illness. HPAI has also affected the dairy industry with 957 dairy herds across 16 states with confirmed cases. There are no cases in dairy in Maryland or any state along the Eastern seaboard. Read more on page 7.

A note about pesticide recertification. If your license expired in December of 2024 and you do not yet have credits, please plan to attend one of the upcoming recertification courses. A pesticide recertification class will be held on March 11th from 6-8 pm in the St. Mary's Extension office. A live online private pesticide recertification training hosted by Dave Myers is scheduled for April 1, 2025 from 6:00 to 8:00 p.m. Finally, a group of Educators have created a hardcopy workbook that you may read, complete a quiz and then submit for credit. You may call any Extension office for a free copy of the workbook. Details are in the newsletter.

Nutrient Management: Greg Simpson, Nutrient Management Advisor is busy writing nutrient management plans. Since September of 2024, we have received requests for 75 plans, with 54 of those requests having complete information (soil test, cropping plans, manure history, etc.). We currently have a list of 20 plans with complete information we are working on. As a reminder, we can't write you plan until you have all of the information in. Give Greg a call at 301-475-4480 if you need a plan.

As the growing season begins to hit full swing, the University of Maryland Extension Office is here to serve you. If you have a question or need information, please give us a call. We rely upon our clientele-- partnering with your to solve issues and finding solutions-- just as you rely upon us for accurate information. Let us know how we can be of help. Have a great growing season! Ben

Events & Information

Private Pesticide Recertification Meeting Notice

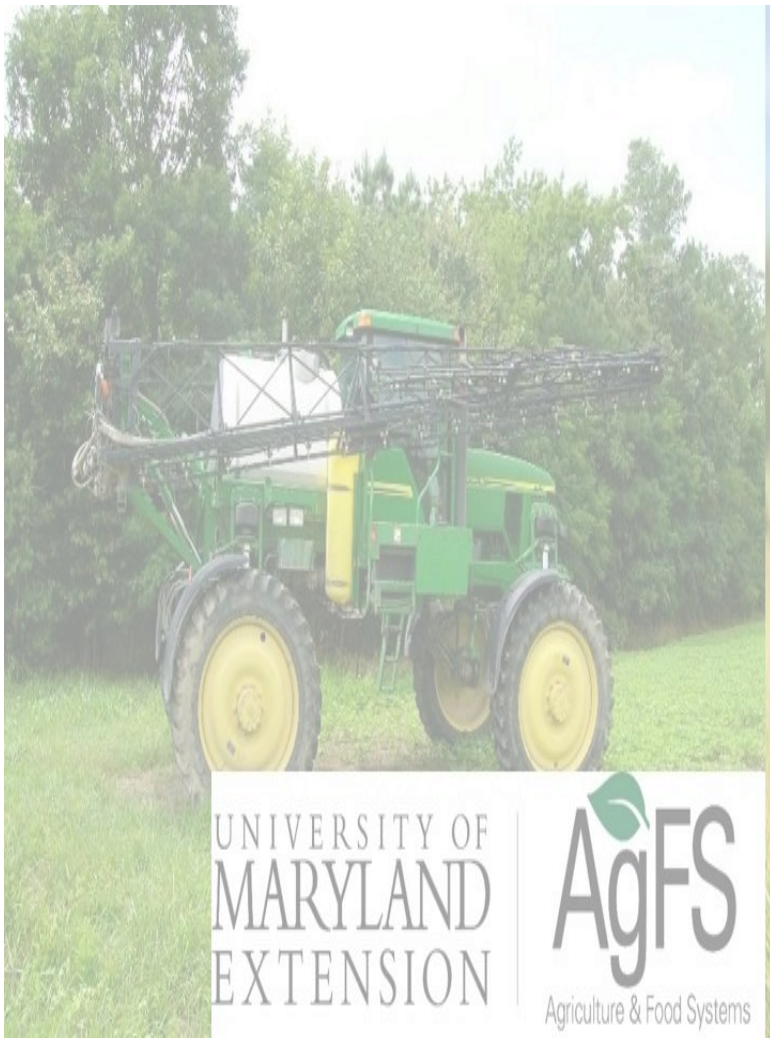
Tuesday, March 11, 2025
6pm—8pm

St. Mary's Extension Office,
26737 Radio Station Way, Suite C Conference Room
Leonardtown, MD 20650

We will be holding Pesticide Recertification training on Tuesday, March 11, 2025 at the St. Mary's County Extension office from 6pm- 8pm

The training will also provide certification for the use of paraquat.

This is the last in-person training this spring for pesticide recertification credits in St. Mary's.



Events & Information

AIR Due March 1

Maryland Department of Agriculture press release (abridge)

The Maryland Department of Agriculture is reminding farmers that Annual Implementation Reports (AIRs) outlining nutrient applications made in calendar year 2024 must be submitted by **March 1, 2025**. Electronic reporting is available through Maryland OneStop for those who want to save time and reduce errors. Farmers new to this electronic reporting option will need to register for an account. Returning farmers should log in to their existing accounts to use the e-file option.

Approximately 5,300 Maryland farmers are regulated by the department's Nutrient Management Program and are required to follow nutrient management plans when fertilizing crops and managing animal manure as well as submit annual reports summarizing nutrient applications for the previous year. Electronic filing is gaining popularity, with 35% of Maryland farmers using Maryland OneStop to file their AIRs last year. Farmers report that it is faster, easier, and more accurate than paper reporting. Users are guided through the application process and receive a delivery confirmation when the report is submitted and status updates as data is verified.

A mail-in option remains available this year for farmers who want to continue to submit paper reports. Paper forms were mailed to all regulated farmers in mid-January and are available for download on the department's website. For more information, farmers should contact Weylin Anderson at 410-980-9479

Extension Internship

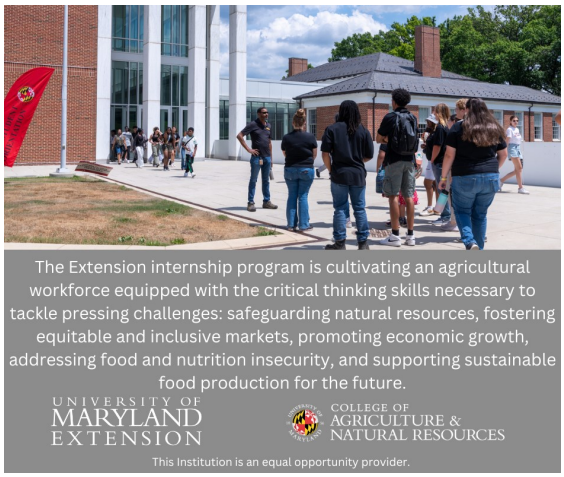
The University of Maryland Extension (UME) is seeking undergraduate students interested in careers in Extension and agriculture industries.

Applications are now open for the 2025 Creating Leadership and Professional Development Through Extension Internships Program. The deadline to apply is 11:59 pm (EST) **March 23, 2025**. If you are a student interested in a career in Extension or agriculture and want to learn more about Extension, applied research, and community outreach, while gaining professional development, leadership skills, and job experience, please apply. This is a great experiential learning opportunity for students seeking a degree or professional certification in agriculture, natural sciences, biological sciences, and related programs. We prioritize students currently enrolled in a two-year program and sophomores and juniors enrolled in a four-year degree program. This is a paid internship!

Access the online application at - https://go.umd.edu/extensioninternships; you will need to fill out the form and send a cover letter, resume, unofficial transcripts, and two (2) letters of recommendation -- at least one must be from a current or former professor/instructor, to andrea1@umd.edu.

Program Contacts:
Shannon Dill, Extension Educator - AgFS
410-822-1244 | sdill@umd.edu
Andrea Franchini, Program Coordinator
301-226-7416 | andrea1@umd.edu

This work is supported by the USDA National Institute of Food and Agriculture, AFRI Competitive Grant Workforce Development, project MD-UME-09312.



Events & Information

Online Session-Pesticide Applicator Recertification April 1, 2025

If you would like the opportunity to learn from home, yet still be engaged, then be sure to enroll in this **Live Online Private Pesticide Recertification Training**, scheduled for **from 6:00 to 8:00 p.m. on Tuesday, April 1, 2025.**

The session will focus on pesticide use and related topics for all field crops, fruits and vegetables. This ZOOM recertification session will be live via the internet directly from the University of Maryland. This meeting will provide Private Applicator Recertification & Nutrient Applicator Voucher Recertification .

Registration is required by March 31st in order to receive ZOOM login instructions.
Register on-line for this event at: https://extension.umd.edu/locations/anne-arundel-county

---

Live On-Line Sessions Nutrient Applicator Voucher Recertification April 8, 2025

If you would like the opportunity to learn from home, yet still be engaged, then be sure to enroll in the **Live Online Nutrient Applicator Voucher Recertification Training**, scheduled for **from 6:00 to 8:00 p.m. Tuesday, April 8, 2025.**

This session will focus on fertility and production related topics for all field crops, fruits and vegetables. This ZOOM recertification session will be live via the internet directly from the University of Maryland. This meeting will provide Private Applicator Recertification & Nutrient Applicator Voucher Recertification .

Registration by April 7th is required in order to receive ZOOM login instructions.
Register on-line for this event at: https://extension.umd.edu/locations/anne-arundel-county

---

Vegetable Production Survey

Veronica Yurchak is the new Extension Vegetable Specialist with University of Maryland. Veronica started in the fall of 2024 and would like your input into research and extension program priorities. If you grow vegetables commercially, this is your opportunity to provide feedback for the challenges you face and the type of research and support you need to make your business successful. Please complete the survey by following QR code or the link: **https://umdsurvey.umd.edu/jfe/form/SV_4T5Z3N9NkQRHZiK.**

Veronica can be reached at vjohnso4@umd.edu or (443) 446-4266.

Events & Information

The Southern Maryland Agricultural Development Commission (SMADC), a division of the Tri-County Council for Southern Maryland, is pleased to announce the 12th Round of the Southern Maryland Farmer Mini-Grant Program.

This program is designed to assist both new and beginning farmers with small start-up projects and to assist experienced farmers who are looking to diversify or expand a current agriculture project. The projects should be simple in scope and must be successfully completed within one year. Both Urban and Rural farms are encouraged to apply.

$60,000 of funding is available. SMADC awards will be up to $3,000 per applicant and are a one-to-one dollar match by the farmer. To date, the program has received 230 applications with 178 applications funded for a total of $301,763.

Grant funds may be used for equipment and services that help transition a farm's sales strategy (such as online sales, home delivery, on-farm sales, etc.), for other projects that allow the farm business to maintain and/or expand sales, for the purchase of foundation livestock and plant stock, marketing and promotion of current farm operation, new fencing for enhancement, expansion, or protection, hoop house, materials needed for value-added food production and on-farm upgrades to enhance food safety, packing and production, freezers and refrigeration.

A free informational webinar addressing frequently asked questions about the mini-grant program will be held on Thursday, February 13th, from 7:00 PM to 8:00 PM. Interested parties are encouraged to register by 12:00 PM on February 12th at Sign-up Here

For complete details of the SMADC Southern Maryland Farmer Mini-Grant Program, including Round 12 Criteria and Guidelines, Eligibility, and to access the online Mini-Grant Application visit www.SMADC.com 'Farmer Resources' to find the Mini-Grants information page.

In Honor of Black History Month

In honor of Black History month, I'm sharing a story on the life and legacy of Henry Blair. (Adopted from the Harford County Farm Newsletter written by Andy Kness).

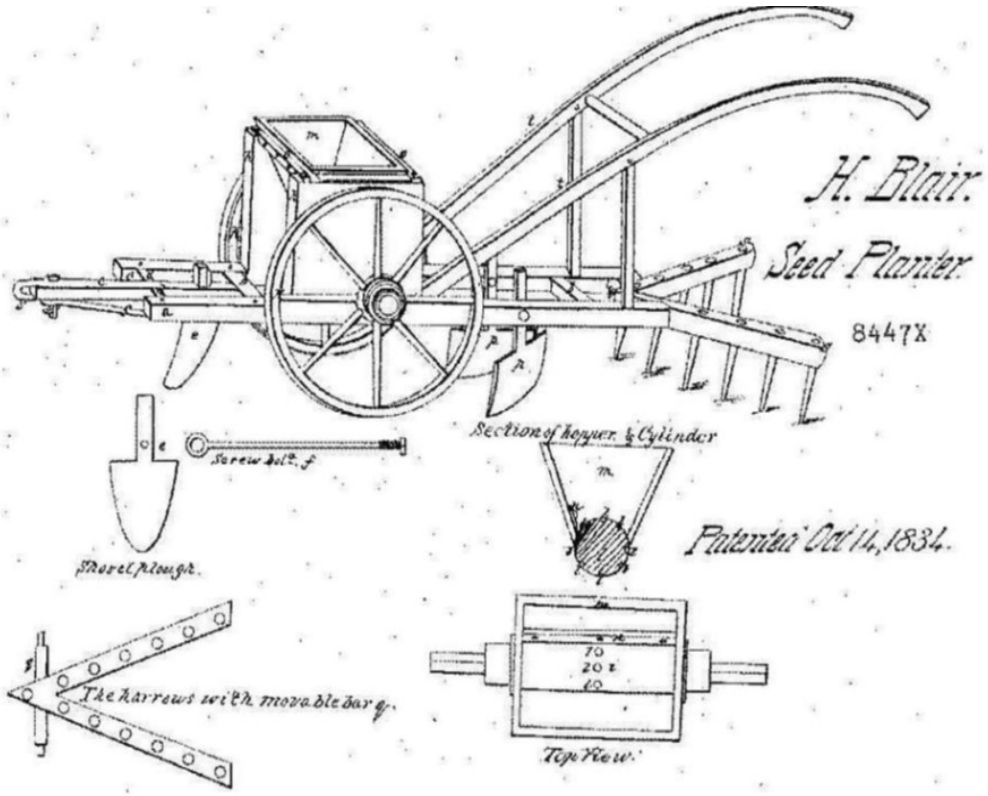
Henry Blair was born in Montgomery County, MD in 1807. Even though Blair lived before the Emancipation Proclamation, he was not a slave and worked as a farmer and business owner. Blair went on to invent two of the most important pieces of farm equipment still used today. In 1834 he patented the first corn planter, followed by the cotton planter in 1836. Blair's invention resembled a wheelbarrow with a hopper to hold seed, which metered and dropped seed into a trench made by a shank on the front of the planter. Rakes at the end of the planter covered the seeds in the furrow.

Blair's invention dramatically improved the efficiency and productivity of farmers and paved the way for many planting improvements, eventually evolving into what we have today. Modern day planters still operate by many of the same principals as Blair's planter in 1834.

At the time of his first patent in 1834, he was only the second black person to hold a patent in the United States and his patent is still the only patent in the record that indicates the patent holder's race.

In 1836, The Mechanics Magazine ran a story about Blair's corn planter and stated: "A free man of colour, Henry Blair by name, has invented a machine called the corn-planter, which is now exhibiting in the capital of Washington. It is described as a very simple and ingenious machine, which, as moved by a horse, opens the furrow, drops (at proper intervals, and in an exact and suitable quantity,) the corn, covers it, and levels the earth, so as, in fact, to plant the corn as rapidly as a horse can draw a plough over the ground. The inventor thinks it will save the labor of eight men. He is about to make some alterations in it to adapt it to the planting of cotton."

Blair died in 1860 of unknown causes and little is known about his life outside of his two inventions. Even though Blair was illiterate (as indicated by signing his patent with an "x"), he is a great reminder of how we are all capable of overcoming adversity to achieve something worthwhile. In the coming months, thousands of farmers with pull thousands of planters out of the shed to plant millions of acres of corn all across the United States; Henry Blair, the illiterate black farmer from Maryland, plays a major role in this process every year.



Preliminary Testing Confirms Highly Pathogenic Avian Influenza in Worcester County

ANNAPOLIS, MD (February 2, 2025)— The **Maryland Department of Agriculture** has announced the first presumptive positive case of H5 avian influenza in a commercial broiler farm in **Worcester County**. This is the fifth case of highly pathogenic H5 avian influenza (HPAI) on a commercial poultry farm on **Maryland's Eastern Shore** and sixth in the state following the announcement of a confirmed case in a backyard flock in **Montgomery County**.

In total, there are now eight commercial operations in the **Delmarva region** confirmed to have HPAI, including two premises in **Kent County, Delaware**, and one premises in **Accomack County, Virginia**.

State officials have quarantined all affected premises, and birds on the properties are being or have been depopulated to prevent the spread of the disease. Birds from affected flocks will not enter the food system.

Confirmation by the U.S. **Department of Agriculture's (USDA) National Veterinary Services Laboratory** is pending with final results anticipated in the coming days.

Avian influenza is a highly contagious airborne respiratory virus that spreads easily among birds through nasal and eye secretions, as well as manure. The virus can be spread in various ways from flock to flock, including by wild birds, through contact with infected poultry, by equipment, and on the clothing and shoes of caretakers. This virus affects poultry, including chickens, ducks, and turkeys, along with some wild bird species such as geese, shorebirds, and raptors.

According to the **Maryland Department of Health**, the risk of transmission between birds and the general public is low. Those who work directly with poultry or dairy farms may be more at risk and should follow key biosecurity practices.

Additionally, the **Maryland Department of Natural Resources** urges waterfowl hunters to take safety precautions to prevent the spread of the virus by washing hands and clothes after handling game and using dedicated clothing, boots, and tools for cleaning game that are not used around domestic poultry or pet birds. Individuals who encounter a dead wild bird should call **USDA's Animal and Plant Health Inspection Service**, which is coordinating collection and disposal efforts with the Department of Natural Resources, at 1-877-463-6497.

The Maryland Department of Agriculture continues to urge growers and backyard flock owners to enhance biosecurity practices and become familiar with what to do if HPAI is suspected in a flock. The U.S. Centers for Disease Control and Prevention share more guidance here.

- Look for signs of illness. Know the warning signs of infectious bird diseases.
- Report suspected sick birds:

- To report a possible case of HPAI in a commercial or backyard flock, call the Maryland Department of Agriculture at 410-841-5810.

Continue on pg. 8

- Commercial chicken growers and backyard flock owners can email questions about the outbreak to MD.Birdflu@maryland.gov.
- To report a sick wild bird in Maryland, call the Maryland Department of Natural Resources (DNR) Wildlife Services hotline at (877) 463-6497 between 8 a.m. and 4:30 p.m. Monday through Friday.

Key biosecurity practices:

- **Clean and disinfect transportation**. Don't walk through or drive trucks, tractors, or equipment in areas where waterfowl or other wildlife feces may be. If you can't avoid this, clean your shoes, vehicle, and equipment thoroughly to prevent bringing disease agents back to your flock. This is especially important when visiting with farmers or those who hunt wildfowl such as when gathering at a local coffee shop, restaurant, or gas station.
- **Remove loose feed**. Don't give wild birds, rodents, and insects a free lunch. Remove spilled or uneaten feed right away, and make sure feed storage units are secure and free of holes. Wild birds can carry HPAI.
- **Keep visitors to a minimum**. Only allow those people who take care of your poultry to come in contact with your birds, including family and friends. Make sure everyone who has contact with your flock follows biosecurity principles.
- **Wash your hands before and after coming in contact with live poultry**. Wash with soap and water. If using a hand sanitizer, first remove manure, feathers, and other materials from your hands because disinfectants will not penetrate organic matter or caked-on dirt.
- **Provide disposable boot covers (preferred) and/or disinfectant footbaths for anyone having contact with your flock**. If using a footbath, be sure to remove all droppings, mud, or debris from boots and shoes using a long-handled scrub brush BEFORE stepping into the disinfectant footbath, and always keep it clean.
- **Change clothes before entering poultry areas and before exiting the property.** Visitors should wear protective outer garments or disposable coveralls, boots, and headgear when handling birds, and shower and/or change clothes when leaving the facility.
- **Clean and disinfect tools or equipment before moving them to a new poultry facility.** Before allowing vehicles, trucks, tractors, or tools and equipment—including egg flats and cases that have come in contact with birds or their droppings—to exit the property, make sure they are cleaned and disinfected to prevent contaminated equipment from transporting disease. Do not move or reuse items that cannot be cleaned and disinfected—such as cardboard egg flats.

For more information on avian influenza, visit: https://mda.maryland.gov/Pages/AvianFlu.aspx.

Note to media: Due to biosecurity concerns, no on-site interviews, photos, or videos are allowed. For all media requests, email: jessica.hackett2@maryland.gov.

Small Equine and Livestock Operations Now Eligible for Conservation Funding

The **Maryland Department of Agriculture** has announced that cost-share funding to install a range of popular best management practices is now available for small-scale equine and livestock operations with at least 1,000 pounds of live animal weight. This expansion of the **Maryland Agricultural Water Quality Cost-Share (MACS) Program** extends the popular conservation assistance program to these smaller farms. Previously, participation in MACS was limited to operations with 8,000 or more pounds of live animal weight.

"We are actively seeking out and working with small farms to get them the financial assistance they need to improve the natural resources that support their operations," said **Maryland Department of Agriculture Secretary Kevin Atticks**. "Erosion and runoff are issues that all equine and livestock operations—large and small—face. We are excited to expand our conservation programs to help everyone do their part to protect the natural resources we all depend on."

MACS currently funds 40 conservation practices that help farmers and landowners reduce soil erosion, manage animal manure, and control nutrient runoff to protect the health of local streams and the Chesapeake Bay, as well as mitigate impacts associated with climate change. The program provides up to 100% cost-share for high-priority practices such as forest buffers and stream exclusion fencing.

Examples of qualifying conservation practices that benefit equine and livestock operations include:

- Watering Facilities – Up to 87.5% cost-share
- Pasture Management – Up to 87.5% cost-share
- Animal Waste Storage Structures – Up to 87.5% cost-share
- Heavy Use Area Protection – Up to 87.5% cost-share
- Roof Runoff Structures – Up to 87.5% cost-share
- Stream Exclusion Fencing – Up to 100% cost-share
- Interior Pasture Fencing – Up to 50% cost-share

Since 1984, MACS has helped thousands of farmers protect natural resources on their farms, safeguard local water quality, and enhance the health of their livestock. Please contact your local soil conservation district to learn more about our conservation grants for small equine and livestock operations. Additional information for equine operations can be found on MDA's Horse Outreach Workgroup website.

County Farmland Rental Rates Now Available

Elizabeth Thilmany, Faculty Specialist
University of Maryland Agriculture Law Education Initiative

Cash rent lease agreements continue to be the most common type of agricultural lease in Maryland, providing a fixed annual payment per acre and relieving landowners of operating and marketing decisions. The USDA's National Agricultural Statistics Service (NASS) annually estimates average cash rental rates per acre for irrigated cropland, nonirrigated cropland, and pastureland at the county and state levels based on data collected from farm-level surveys. For more information on the NASS Cash Rents Survey, visit https:/ www.nass.usda.gov/Surveys/Guide_to_NASS_Surveys/Cash_Rents_by_County/.

This year, the University of Maryland has updated its publication to provide Maryland-specific insights into these rental rates, supporting producers, landowners, and other stakeholders in making informed decisions about farmland leases. The 2024 report includes comprehensive data on rental rates for non-irrigated cropland, irrigated cropland, and pastureland, organized by county and regions.

Updates in the 2024 Report:

The report includes updated graphs with trendlines showing rental rate changes over time, providing a clear view of recent trends in Maryland's non-irrigated, irrigated, and pastureland values. It also offers a detailed breakdown of rental rates by county, highlighting variations across agricultural districts.

Static maps for 2024 show county- level rental rates for non-irrigated cropland and pastureland, enabling producers to visualize rental trends across the state.

The 2024 report is a valuable resource for understanding how factors like soil quality, water access, and economic conditions affect rental rates in Maryland. This information helps producers and landowners make informed rental agreements and land management choices.

The full 2024 report and downloadable data files are available at: https://go.umd.edu/UMELeases.

Maryland County-Level Cash Rental Rates for Non-Irrigated Land (2014-2024)

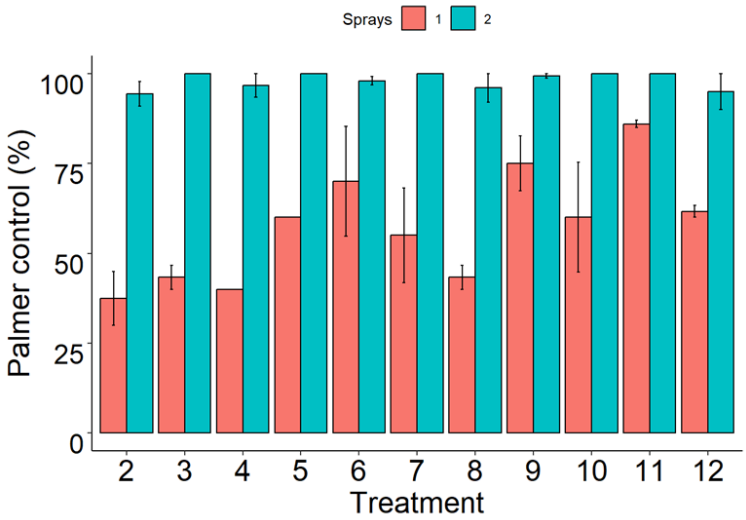
County	Ag District	2014	2016	2017	2019	2020	2021	2022	2023	2024
Dorchester	Lower Eastern Shore	95.50	107.00	108.00	88.50	91.00	91.00	79.00	83.00	108.00
Somerset	Lower Eastern Shore	76.50	88.50	76.00	81.50	81.50	92.00	102.00	108.00	89.00
Wicomico	Lower Eastern Shore	77.50	81.50	95.00	84.00	84.00	84.00	90.00	94.50	96.00
Worcester	Lower Eastern Shore	84.50	88.50	87.50	92.50	95.00	103.00	112.00	96.50	104.00
Baltimore	North Central	122.00	75.00	92.50	89.00	83.50	96.50	98.50	97.00	148.00
Carroll	North Central	88.00	136.00	106.00	105.00	99.00	96.00	92.00	92.00	132.00
Frederick	North Central	77.00	105.00	80.00	76.00	76.50	90.50	83.50	101.00	125.00
Harford	North Central	164.00	120.00	138.00	149.00	167.00	156.00	166.00	168.00	123.00
Howard	North Central	76.50	74.00	72.50	89.00	83.50				
Montgomery	North Central	76.50	63.00	49.50	89.00	83.50	66.50	84.00	105.00	113.00
Washington	North Central	76.00	75.00	88.00	74.50	80.50	96.00	85.50	90.50	119.00
Anne Arundel	Southern	51.00	48.50	43.50	61.00	51.00	65.00	69.50	85.00	
Calvert	Southern	57.00	64.50	41.50	61.00	51.00	45.00	41.00	37.50	56.00
Charles	Southern	39.00	39.00	40.50	40.50	36.50	42.50	49.50	53.00	51.00
Prince George's	Southern	51.00	48.50	43.50	38.00	44.00	51.75	54.50	49.25	41.50
St. Mary's	Southern	54.50	45.50	45.00	51.00	52.00	58.50	59.50	45.50	48.50
Caroline	Upper Eastern Shore	95.50	110.00	101.00	101.00	105.00	112.00	126.00	117.00	144.00
Cecil	Upper Eastern Shore	89.50	94.00	103.00	103.00	116.00	138.00	157.00	155.00	141.00
Kent	Upper Eastern Shore	111.00	113.00	131.00	145.00	147.00	159.00	185.00	179.00	186.00
Queen Anne's	Upper Eastern Shore	122.00	136.00	125.00	148.00	136.00	144.00	168.00	143.00	169.00
Talbot	Upper Eastern Shore	109.00	108.00	102.00	102.00	110.00	113.00	113.00	136.00	134.00
Allegany	Western	26.00	23.50	58.00	55.50	28.00				
Garrett	Western	35.50	32.50	37.00	35.50	35.00	37.50	37.00	40.50	40.50
Maryland (all Counties) Average		92.00	100.00	94.00	100.00	98.00	103.00	111.00	117.00	124.00
Minimum		23.50	37.00	37.00	35.50	28.00	37.50	37.00	37.50	40.50
Median		77.00	81.50	88.00	86.25	87.50	92.00	90.00	96.50	116.00
Maximum		164.00	136.00	138.00	149.00	167.00	159.00	185.00	179.00	186.00

Update of Local UMD Field Trials in St. Mary's County

Each year the University of Maryland Extension office collaborates with area farmers to conduct applied research on issues of local importance. Below is a summary of trials conducted during the 2024 growing season, and plans for the 2025 season. We are always looking for collaborators, so please let us know if you are interested.

Integrated Management of Herbicide Resistant Weeds

Following two years of burndown treatment trials, the field trial in 2024 studied 12 rescue treatments for management of larger palmer amaranth weeds. Rescue treatments typically occur when weed a management plan fails, resulting in weeds that are larger than the preferred application window. Failure can be attributed to weather related conditions that prevent timely sprays such as flooded fields or windy conditions; Initial pre-emergent application failures due to limited activating rainfall, or poor management. Rescue applications are not preferred as they increase the risk of resistance and are often not completely effective. Farmers often ask the best strategy for control of palmer amaranth in these situations. Farmers should be aware of label restrictions for postemergence applications. For example, Enlist may be applied through R1, Reflex applied up to bloom and at least 45 days form harvest and Liberty up to R1. Growers should always refer to the product label for specific guidance. The treatment protocol included a single application of 12 treatments. The plots were then split and a second application of a sequential treatment was applied 15 days later. Plots were rated for percent control and analyzed using the R statistical program.



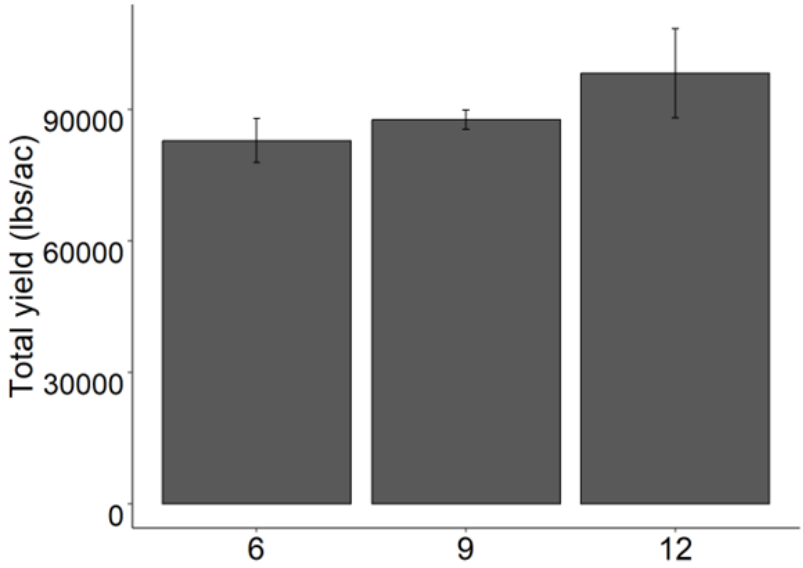
Results: The best single application only achieved 80% percent control. Control tended to decrease over time as Palmer amaranth weeds recovered from the initial application. Plants would often sucker from the bottom of the plant and regrow. **The bottom line is no treatment provided an acceptable level of control of large palmer amaranth with a single application. However, applying a sequential treatment 15 days after the initial treatment provided much better control of large Palmer amaranth.** As seen in figure 2, control increased significantly with a sequential application, regardless of whether that treatment was based on Enlist, Liberty or a combination of the two. This study shows that farmers who wish to control larger palmer amaranth in a rescue treatment situation should plan on using at least two sequential herbicide applications. This work is supported with funding from the Maryland Soybean Board and the USDA-NIFA Crop Protection and Pest Management program.

Continue on pg. 12

Watermelon Grafting for Managing Fusarium Wilt

This is the 6th year of evaluating grafting of watermelon transplants for fusarium wilt management. Trials during the first two year showed almost zero plant death from fusarium wilt on grafted plants. Grafted plants show higher vigor, root mass and yield compared to non-grafted plants. Grafting plants appear to be a viable option for management of fusarium wilt in Maryland. Research during the last two years focused on finding ideal populations with grafted plants. Watermelons are typically planted on 4 foot in row spacing. Studies in St. Mary's as well as the Eastern Shore looked at increasing spacing to 6 or 8 foot to reduce the number of plants needed per acre. This research showed populations can be decreased with 6 or 8 foot spacing yielding similar to 4 foot spacing.

In 2024, a trial was conducted looking at increasing the distance between plastic rows from 6 feet up to 12 feet. Increasing spacing between plastic rows can reduce the amount of plastic mulch and drip tape needed. Plastic mulch spacing of 6 foot (standard), 9 foot and 12 foot were established with 3 replications. Plant population was held constant at 1450 plants per acre (60, 40 and 30 inches between plants for 6, 9 and 12 foot mulch spacing). Plant vigor, canopy closure, yield, fruit count and individual fruit mass was collected during three harvests. Canopy coverage was 99.52%, 99.61% and 99.56% for 6, 9, and 12 foot spacing 65 days after planting. Watermelons were harvested across three weeks. Total yield was 82,945 lbs/acre, 87,754 lbs/acre and 98,336 lbs/acre for the 6, 9, and 12 foot spacing with no statistical difference between treatments. Total fruit count was 5846 melons/acre, 5485 melons/acre and 5808 melons per acre for the 6, 9, and 12 foot spacing with no statistical difference between treatments. Individual average fruit weight was 14.7 pounds, 16.1 pounds and 16.9 pounds for the 6, 9, and 12 foot spacing. The individual fruit weight was significantly different with wider spacing producing slightly larger melons. **While this was only one year of data, the results demonstrate the potential to increase plastic mulch spacing with grafted plants while not reducing yield.** The trial will be repeated in 2025.



Evaluating Faba Bean as an Alternative Crop in the Mid Atlantic:

University of Maryland is collaborating with researchers from Virginia Tech, University of Delaware, Virginia State University and North Carolina State University are collaborating on a project to develop high-protein and stress tolerant faba bean for winter production. Faba bean is a legume crop with a high protein content, dietary fiber, iron, zinc, vitamins, and bioactive compounds. It has potential as a winter legume serving the plant protein market as well as nutritional supplement market.

Continue on pg. 13

The project is using a multi-faceted approach including a screening (500 initial lines) and breeding program, identifying best agronomic and pest management practices, evaluation of biotic, abiotic, nutritional and sensory factors, and economic analysis. Trials in St. Mary's County will focus on identifying best agronomic practices for growing advanced elected breeding lines. In the fall of 2024, we established four cultivars in a replicated field trial. The low temperature this winter will be a good test for cold hardiness. We are looking for several growers to host trials in the next three years. Please let me know if you are interested. This work is supported by the USDA Specialty Block Crop Research Initiative.

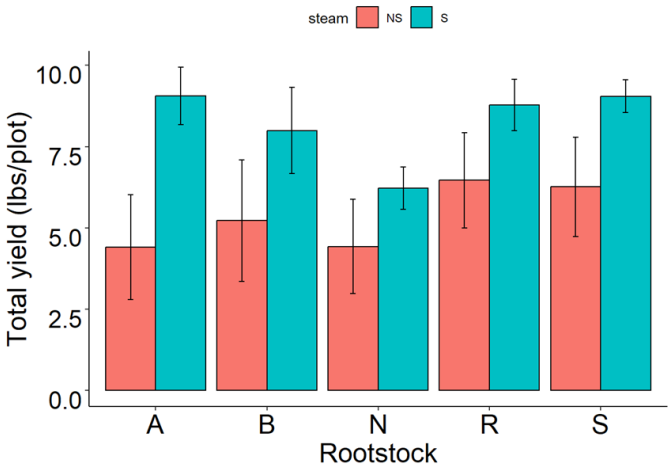
Evaluating Soil Steaming and Plant Grafting to Manage Soil Borne Diseases:

The research project will include field experiments looking at new tomato rootstocks with potential for resistance to southern bacterial wilt, root knot nematode, fusarium crown wilt and other diseases. The study will also look at how effective soil steaming is for reducing similar pathogens. This work is supported by Maryland Specialty Crop Program.

Trials were conducted in 2024 at three high tunnel sites. Tomato rootstocks with reported resistance to bacterial wilt were researched and six rootstocks were selected for trial as follows: Fortius, Armada, Bowman, RST -104-106, Shin Cheon Gong and Amatera, as well as a non-grated control. Rootstocks were grown and grafted to scion cultivars "Big Beef", "Cherokee Purple" and "Red Deuce" by Trihishtil Company in North Carolina. Tomatoes were planted in the spring of 2024 and evaluated throughout the season for yield, disease incidence and severity, plant vigor, and nematode presence. In addition, to root stocks, split trials in the two of the houses were conducted to evaluate the effect of soil steaming. Two houses were steamed utilizing a commercial soil steam generator. A non-steamed area was left for comparison. Soil temperature at varying depths was recorded during the steaming. Pre and post soil test were conducted to evaluate soil fertility, soil health, and nematode levels. Tomatoes were then planted in steamed and non-steamed replicated trials and evaluated throughout the season for yield, disease incidence and severity, plant vigor, and nematode presence.

Results: We are still analyzing the effect of steaming and rootstocks on plant performance. IN the first trial, based on the first year of preliminary data in comparing steaming and the four rootstocks grafted to Big Beef. It appears that steaming significantly increased yield. In the early planted house, we noted differences in yields between the different rootstocks, however those differences were not significant. We also saw a substantial decline in root knot nematode populations 2 weeks after steaming. However, those populations had rebounded by the end of the season, which indicated steaming may provide control for the season, it will not provide long-term control of root knot nematodes.

This work is continuing in 2025. We are looking for additional sites for steaming. Please reach out if interested.

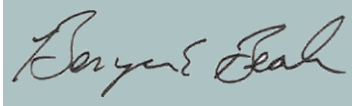


Yield per plot of tomatoes comparing non-steamed (red) and steamed (blue) among the following rootstocks: A-Armada; B-Bowman; N-non grafted; R-RST-104-06; and S-Shin Cheon Gang

UNIVERSITY OF MARYLAND EXTENSION

http://extension.umd.edu/st-marys-county

All the best for a Productive Year



Benjamin E. Beale, Extension Educator
UME – St. Mary's County
Agriculture & Natural Resources

Greg Simpson
Nutrient Management Advisor
UME—St. Mary's County

Jamie Fleming, Administrative Asst. II
UME – St. Mary's County

Melissa Russell, Administrative Asst. I
UME – St. Mary's County

UME St. Mary's County
26737 Radio Station Way,
Suite E-2
Leonardtown, MD 20650
TE: 301-475-4484

On the Lighter Side…

The Nosy Store Manager:

Last week a store manager at a local hardware store overheard the clerk saying to a customer, ***"No, ma'am, we haven't had any for some weeks now, and it doesn't look as if we'll be getting any soon."***

Alarmed by what was being said, the manager rushed over to the customer who was walking out the door and said, ***"That isn't true, ma'am. Of course, we'll have some soon. In fact, we placed an order for it a couple of weeks ago."*** The lady turned, glared at the store manager like he was an idiot, and walked out the door.

Furious, the manager went straight over to the clerk with a sour look on his face. The manager drew the clerk aside and growled, ***"Never, never, never, never say we don't have something. If we don't have it, say we ordered it and it's on its way. Now, what was it she wanted?"***

The clerk replied, ***"Rain."***

Source: https://nwdistrict.ifas.ufl.edu/phag/2016/11/11/friday-funny-the-nosy-store-manager/

What do you call a sleeping bull?
A Bulldozer.

Farmer Giles is so interested in conserving energy, he built a pig-powered car.
He has to get rid of it, though. Every time he turns a corner, the tires squeal

What's a potatoes least favorite day of the week?
Fry-day!

What do you call a cow with no calf?
Decaffeinated