

University of Maryland Extension

Harford County

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I hope everyone had a great time at the $\ensuremath{\mathsf{STATE}}$ FAIRHarford County Farm Fair and has had a moment to recover. The livestock auction was once again the highlight of the fair and once again record-setting; over \$600,000 was raised to support our 4-H and FFA youth! We cannot thank our generous buyers enough! We can also not forget about all of the volunteers and families that donated their time to make everything possible; thank you!

Of course, fair season is not over yet! The Maryland State Fair is set to kick off this month on August 25. The schedule looks a bit different this year; the fair will be open for three consecutive weekends from August 25 -28, September 1-5, and September 8-11. You can head over to marylandstatefair.com to check out the complete schedule and all of the attractions. Fairs are a fundamental and important part of 4-H, Extension, FFA, and educating the general public about all facets of agriculture, so we appreciate your support and contributions to this effort!

Speaking of 4-H, I want to bring to your attention that we are currently hiring a 4-H Extension Educator in the Harford County office. This position will oversee the 4-H program in the county. Apply by August 18 for best consideration. The full

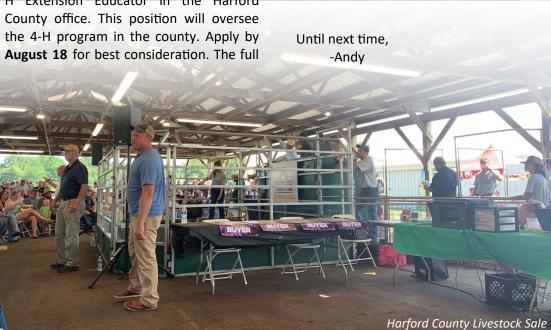
posting is online at ejobs.umd.edu. In the search box, search for job number 103623. All applications must be submitted through this website. Please apply if you are interested or share to those that you think might be interested!

MARYLAND

We would also like to thank our outgoing 4-H Educator, Dwayne Murphy, for his leadership of the Harford 4-H program. Dwayne is leaving University of Maryland Extension at the end of September to pursue his master's degree and we wish him well in his next steps.

If you have any questions regarding the Harford 4-H opening, you may reach out to me via email or phone and I will gladly answer any questions.

On a different topic, this year's wheat crop was among one of our best ever. For those interested in growing wheat (or barley), UMD has released the results of our 2022 small grain variety trial. These data can help aid in selecting suitable varieties. Information regarding this report is available on page 3.



Job Opening: 4-H Educator



University of Maryland is currently seeking a 4-H youth educator for the Harford County 4-H program! For best consideration, apply by August 18, 2022! All applications must be made online at ejobs.umd.edu; search for

position number 103623.

This is a non-tenure track faculty position that leads the 4-H program in Harford County. The Educator would work with volunteers and youth development agencies to provide experiential learning opportunities for youth, leading to the development of life skills for youth. The Educator is also responsible for developing an active, ongoing recruitment campaign to involve new volunteers and youth. As a professional track faculty member, the Educator will be responsible for developing youth development programs in cooperation with colleagues across the County and Northern cluster (Carroll, Baltimore, and Harford).

Minimum qualifications include a B.S. degree in youth development, education, social science, or a related field; and at least one year of experience in youth development/youth education.

To view the complete job posting and to apply, go to <u>ejobs.umd.edu</u> and search for position number 103623.

Beef Webinar: Stockpiling Pasture

Join us for our monthly beef cattle webinar series on the second Tuesday of each month from 7:30-8:30 p.m. During this session, we will discuss tips for stockpiling forage to extend the grazing season. Register online: go.umd.edu/beef-webinars.

August 9 7:30—8:30 PM Online via Zoom

Maryland Beef Webinars

Join us on the second Tuesday of each month from 7:30-8:30 pm

March 8 — To deworm or not to deworm?

April 12 — Breeding and Genetics

May — Break for weekly public beef education series

June 14 — Interpreting a Forage Analysis

July 12 — Mineral Nutrition for Beef Cattle

<u>August 9</u>— Pasture Management: Stockpiling Tips

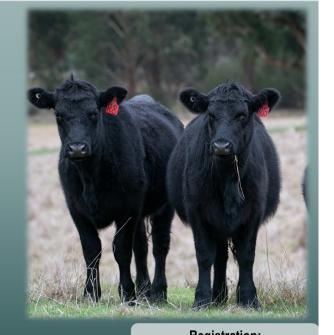
<u>September 13</u> — Spring Stocker Cattle Recap:

Successes and Lessons Learned

October 11 — Utilizing Crop Residue as a Forage Source

November 8 — Benchmarking for Success

<u>December 13</u> — Wintering Bulls and Cows





Registration: https://go.umd.edu/beef-webinars



UMD Small Grain Variety Trials

Andrew Kness, Senior Agriculture Agent University of Maryland Extension, Harford County

Results of the 2022 Maryland Wheat and Barley Variety Trials are now available. The trials evaluate wheat and barley yield, head scab/DON, and growth characteristics of select varieties planted across the state of Maryland. Data is used to help farmers and crop advisors select the best performing varieties. When picking varieties, remember to select varieties that have good yield stability and have good resistance to Fusarium head blight.

The report is too lengthy to include in this newsletter; an online copy of the report can be downloaded at http://blog.umd.edu/agronomynews/2022/07/27/2022-maryland-small-grain-variety-trials/ or call the Extension office for a hard copy. For more information about how to interpret and apply variety trial data, consult this fact sheet. For questions regarding the small grain trials, contact Dr. Vijay Tiwari (vktiwari@umd.edu) or Dr. Nidhi Rawat (nidhirwt@umd.edu).

Japanese Stiltgrass Identification & Management

Kelly Nichols, Agriculture Agent
University of Maryland Extension, Montgomery County



Figure 1. Japanese stiltgrass.

Japanese stiltgrass is an invasive grass that is typically seen in wooded areas. It likes shaded, wet areas and can easily take over the forest understory.

Unfortunately, it can

also creep into pastures and hay fields. The leaves of Japanese stiltgrass are wider and shorter than most of our common pasture grasses. There is also a distinctive silvery midvein that is slightly off-center from the middle of the leaf (Figure 1). Japanese stiltgrass also has a shallow root system, so it can be pulled out easily. For more information on how to identify stiltgrass, visit USDA's National Invasive Species Information Center website.

The one (and only one) positive thing about this invasive is that it is an annual, so there's no perennial root system to contend with. However, as an annual, stiltgrass spreads by seeds. Seed heads start to form in mid-September through October. Once they are visible but before they produce hard seed (Figure 2), mow the area to prevent the seeds from maturing and becoming viable. Stiltgrass will likely not have enough time to regrow and set more seeds before the first frost.

Herbicides are another option. A broad spectrum herbicide such as glyphosate, can be used to control stiltgrass; however, keep in mind that broad spectrum herbicides will injure or kill any plant that it touches. So, this would be an option for spot-spraying heavily infested areas.

Prowl H20°, which contains the active ingredient

pendimethalin, is labeled for applications on established grass that has at least 6 tillers. Prowl H2O is a pre-emergent herbicide, and must be applied before the stiltgrass emerges in order to suppress germination. Stiltgrass can germinate as early as when the soil temperature is about 50°F, so Prowl H2O will need to be applied earlier than when we may be used to when controlling other summer annual weeds. While Prowl H2O is a good option, reseeding restrictions of 10 months for pasture grasses and 6 months for alfalfa may make it a challenge for reseeding after the stiltgrass is gone. (Remember, Prowl H2O is a pre-emergent herbicide, so it will prevent grass and alfalfa seeds from germinating, too.) If Prowl H2O is used, manage the bare areas so that weeds cannot take over before re-seeding can



Figure 2. Japanese stiltgrass seed head emerging.

Once a control method is implemented, re-seed bare areas so they are not left for stiltgrass and other weeds to fill back in. Following your nutrient management plan can also be helpful to provide the hay and pasture grasses the fertility they need to compete with the stiltgrass.

Stockpiling Pasture for Fall & Winter Grazing

Amanda Grev, Forage and Pasture Management Specialist University of Maryland Extension

With August upon us, we may still be feeling the heat of the summer at the moment but whether or not we're ready, cooler temperatures are just around the corner and it's time to be thinking about winter feeding strategies. Using harvested forages for winter feed represents a substantial expense for livestock operations. For many grazing operations, stockpiling can be an effective strategy to extend forage resources further into the fall and winter season, reducing the costs associated with harvesting and storing feed and providing high-quality pasture for fall and winter grazing.

What is stockpiling?

The concept of stockpiling is simple. Rather than cutting, drying, and storing hay to feed over the winter, existing pastures are allowed to grow and accumulate forage in the field to be grazed by livestock in a later season. Under this management strategy, grazing animals are removed from pastures in late summer and forages are allowed to accumulate growth through the late summer and fall. The cool, late-season temperatures make it possible for the accumulation of high-quality forage even after an extended period of growth. This stockpiled forage is then available for grazing throughout the fall and winter months, reducing the costs associated with feeding stored feeds.

Which forages work best?

Although a number of different forages can be stockpiled, some forage species will hold their nutritional value longer than others in the winter months. Compared to other cool-season grasses, tall fescue is well adapted for stockpiling, as it has the ability to accumulate a substantial amount of fall growth and tolerate colder temperatures without losing quality. In addition, the waxy layer or cuticle on the leaves of tall fescue make the plant more resistant to frost damage or deterioration. Tall fescue also forms a good sod, making it more tolerant to foot

traffic and minimizing impacts on its productivity the following season.

How is stockpiling accomplished?

Early August is the time to begin stockpiling for fall and winter grazing. To prepare for stockpiling, pastures should be grazed (or clipped) down to a 3 to 4 inch stubble height to ensure that the accumulated forage will come from new growth. After livestock are removed, 40 to 60 pounds of nitrogen fertilizer should be applied to stimulate additional regrowth and optimize forage accumulation and quality. The grasses should then be allowed to regrow until forage growth dramatically slows or ceases completely.

It should be noted that not all nitrogen fertilizers will be equally efficient when fertilizing pastures in the fall. In urea or urea-based fertilizers, the ammonia is volatile and a substantial amount of the nitrogen from these sources will be released to the atmosphere via volatilization when applied during the hot and humid days of late summer. To minimize this volatilization, these nitrogen sources should be applied immediately prior to a significant rainfall event. Ammonium nitrate is the most efficient source of nitrogen for stockpiling, but it is often more expensive than other sources.

Will yield and quality be good?

Where tall fescue was successfully stockpiled, yields of 1 to over 1.5 tons of dry matter per acre have been documented. Higher yields will be achieved if nitrogen is applied immediately after the last cutting or grazing compared to pastures that did not receive fertilization or were fertilized later in the fall.

Forage quality of stockpiled tall fescue can be very good. Depending on the amount of nitrogen applied, fall-grown tall fescue can average 12 to 18% protein and can maintain good nutritional value throughout the fall season. Research has demonstrated that stockpiled tall fescue has sufficient quality to carry dry cows through the winter and could carry lactating beef cows into

5 January without additional supplementation. However, the forage quality and digestibility of stockpiled forages is variable and will decline as growth accumulates, forages mature, and winter conditions continue. To confirm nutritional value, forage samples should be taken and analyzed to ensure the pasture is meeting the nutritional requirements of the animals utilizing it.

How to utilize stockpiled forage?

Stockpiled forage can be valuable under a variety of grazing methods, but forage utilization can be increased substantially by using improved grazing practices. If livestock are allowed to continuously graze the entire pasture with unrestricted access, efficiency will be lower and the potential grazing period will be shortened due to waste and trampling damage. To minimize waste and get the most from stockpiled forage, pastures should be either rotationally or strip grazed. Strip grazing is a management

system that involves giving livestock a fresh area of pasture every day or every few days by moving a temporary electric fence in the pasture. This method limits the area available for grazing, helping to increase pasture carrying capacity and maximize forage utilization.

Summary

Removing livestock and fertilizing pastures or hayfields in late summer will allow forage growth to be stockpiled for late fall and winter grazing. Utilization of stockpiled pasture is an economically-advantageous management strategy that will extend the grazing season, minimize winter hay feeding and stored feed requirements, and provide high-quality forage without negatively impacting the persistence of forage stands.

Horse Industry Board Grant Applications

Maryland Department of Agriculture <u>press release</u>

The Maryland Horse Industry Board (MHIB) will begin accepting grant applications for the 2023 grant year. The goals of the grant program are to promote the Maryland equine industry by increasing public awareness and participation, advancing education and training, supporting and promoting equestrian events, programs, and activities, and preserving access and use of public lands for riding. The deadline to apply is October 7, 2022.

"The horse industry is a valued part of Maryland's strong agricultural economy," said Agriculture Secretary Joe Bartenfelder. "These grants provide opportunity and growth for this important sector, which provides \$2.1 billion to the state's economy and it does so by using funding generated from within that sector. I thank the Maryland Horse Industry Board for this grant opportunity and for its dedication to the promotion of equestrian and equine activities."

For the first time, applications will be accepted electronically, as well as by hard copy. Applicants are urged to read the 2023 Grant Guidelines carefully.

Proposals that are aligned with the Action Items found in the 2019 Maryland Horse Forum Report will be given strong consideration as well as applications that aim to enhance diversity and inclusion in the Maryland horse industry. Proposal review will weigh the quality of their written presentation, potential impact and value to the industry, feasibility of the project, financial need and potential for matching funds. Grant requests should not exceed \$3,000.

Organizations eligible for the grants include nonprofit organizations, clubs and associations, businesses, licensed farms and stables, government entities, schools and educational institutions. Grant recipients will be announced no later than January 1, 2023. Funding will be available after that date. All grantfunded projects should be completed by June 30, 2023.

The MHIB was established in 1998 to promote and develop the equine industry in Maryland. Funding for these grants and for the MHIB is provided by the Maryland Feed Fund, which collects \$6 on every ton of horse feed sold in Maryland. Since the Maryland Feed Fund was established in 2002, MHIB has awarded more than \$500,000 in grant monies to over 400 projects throughout Maryland.

For more information, please visit mda.maryland.gov/horseboard or contact MHIB's Executive Director, Ross Peddicord, at 240-344-0000 or moss.peddicord@maryland.gov.



Corn Earworm Numbers On The Rise

Alan Leslie, Kelly Hamby, Galen Dively, Andrew Kness, Kelly Nichols, Emily Zobel, Maria Cramer, and Sarah Hirsh University of Maryland

*Editor's note: Article abridged; for entire article visit http://blog.umd.edu/umefruitveg/2022/07/29/corn-earworm-numbers-on-the-rise/



Fig 1. Adult corn earworm moth. Image: Whitney Cranshaw, Colorado State University, Bugwood.org

Corn earworm moth counts in pheromone traps have been increasing over the past few days in some areas in Maryland and Delaware. Sweet corn growers should keep an eye out and consider shortening spray intervals to a 2 to 3-day spray schedule while others could still be around a 3 to 4-day spray schedule.

Corn earworm (CEW), Helicoverpa zea, also known as tomato fruitworm, sorghum head worm, and podworm, is a common pest on sweet corn and vegetable crops during the summer and early fall in the Mid-Atlantic region. Corn earworm moths are nocturnal, living for about 2 weeks. They can be found flying from mid-July to September. Corn earworm adults are tan-colored, with a wingspan of 1.5 inches, with dark central spots that are easily visible even from the underside. A single female moth can lay over 3000 eggs. Eggs hatch in 2-4 days.

Corn earworm larvae range in color from green, brown, pink to yellow or sometimes black, with dark lengthwise stripes. Larvae have four pairs of abdominal prolegs, with a light brown-orange head. They undergo 6 instars in 2-3 weeks depending on temperature. Upon completion of development, larvae drop to the ground from the infested crop, where they then burrow 2-4 inches within the soil to pupate and overwinter. Corn earworm pupae are 0.5-1 inch in length and dark brown.

Corn earworms are strongly attracted to and prefer fresh corn silks for egg laying. Outbreaks in other crops often follow a midsummer drought, which causes the corn to ripen earlier and become less attractive to the moths. As early planted corn fields dry down, moths will move into other vegetable and grain crops.

Sweet Corn Control

Direct sampling for caterpillars during silking is not practical. Monitoring pressure using on-farm traps provides the most accurate information for making management decisions. We recommend using two pheromone traps and replacing the lures frequently, especially during periods of hot weather. Trapping can

indicate the severity of pressure and can inform the timing and frequency of insecticide applications.

Moths are attracted to ears with fresh green silks, where most eggs are laid. Complete silk emergence from all ears generally takes 4 to 8 days. After spraying at the early silking stage, newly emerged silks are not protected. This means spray intervals should be tightest during fresh silk. In addition, when weather is in the 90s (°F), it takes 2 days for eggs to hatch and 2 hours for small larvae to move down the silk channel and begin feeding on the ear tip, where they are protected from foliar sprays.

Generally, an insecticide spray is applied at early green silking as soon as the first moth is captured on the farm, and applications are repeated at 3 to 6 day intervals based on moth pressure, corn growth stage, weather, Bt trait, and tolerance for ear damage. When CEW populations are heavy (> 10 moths captured per night) it may be necessary to treat on a 2-3 day schedule. Sprays may be required up until 5 days from the final harvest date. For best control during heavy infestations, maximize the gallonage of water per acre and/or use a wetting agent if possible.

It is important to rotate insecticide classes within a season. The cheaper pyrethroid (Group 3A) products have been the popular choice but their efficacy has significantly declined due to resistance in corn earworm populations. When first introduced, pyrethroids provided greater than 95% control of corn earworm, but currently control has declined to around 50% due to resistance. Pyrethroids no longer provide enough ear protection on many farms, so growers need to consider incorporating other modes of action into spray programs. ALWAYS read and follow instructions on the pesticide label.

As an alternative, the most potent bioinsecticide for sweet corn insect control is provided by GMO hybrids expressing one or more insect-active toxins from the bacterium, *Bacillus thuringiensis* (Bt sweet corn). Bt hybrids that express single or multiple Cry proteins no longer control earworms due to the development of resistance; only hybrids expressing the Vip3a Bt protein have been shown to provide good ear protection. Although these hybrids provide 100% control of the European corn borer, they do not provide enough control of corn earworm and other lepidopteran pests depending on the expressed toxins and thus supplemental insecticide sprays may be needed to ensure quality ears, especially during high moth activity. Stink Bugs are not controlled by Bt.

Webinar: Solar On The Farm

Are you interested in using solar to power your farm or business? Maybe you're interested in leasing your land for solar development? Or perhaps, you'd like to learn more about how solar works and what opportunities are available with solar energy. Whatever the case may be, you'll want to join the upcoming "Solar on the Farm" Webinar on August 16 (1:00 p.m.-2:30 p.m.). University of Maryland (UMD) Extension Specialists and industry representatives will discuss opportunities for farms and businesses with an interest in solar electricity. Attendees will learn about the opportunities, challenges, and practical applications of solar energy in Maryland. The webinar will cover important topics to help you decide if solar is right for you, and how you can install a solar electric system that will meet your needs. Topics will include:

- How solar energy works and what role it plays
- How a solar project impacts you as a landowner
- How to finance and facilitate a solar project

In light of Maryland's high energy costs, as well as the decreasing cost of solar technology, many are choosing to offset their energy use with small-scale solar electric systems. Others have an interest in the various environmental benefits associated with solar electricity. Various federal and state policies, including tax credits and solar renewable energy credits (SRECs), have further contributed to solar market growth. The leasing of land to support large-scale solar installations has also come under the spotlight recently, with over 200 megawatts (MW) of utility-scale capacity installed in Maryland since 2017. Regardless of the motivations, Maryland has become one of the fastest-growing solar energy producers in the country, ranking 17th in the nation for solar power production in 2020.

This webinar is free to attend, but registration is required. More information and registration details can be found online at go.umd.edu/Solar2022. For more information, or if you need a reasonable accommodation to participate, please contact Drew Schiavone (dschiavo@umd.edu, 301-432-2767).



The Mill's Crop Showcase is celebrating 12 years of education, demonstration and fellowship for farmers at our annual event. Learn from leading industry experts and hop on a wagon for a tour across the farm to get the inside scoop on the various products, applications and technologies being studied this year!

Education • Tours • Vendors • Fellowship • and more! Great resources are just a click away!

Andrew Kness
Senior Extension Agent,
Agriculture and
Food Systems



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Back-issues can be found at: https://extension.umd.edu/locations/harford-county/ agriculture-and-nutrient-management

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Dates to remember

- 01-31 Aug. ALEI Farm Business Structure Webinar Series. 12
 -1 PM. Online via Zoom. Weekly each Monday in August.
 Free. Register online.
- **04 Aug.** Hop Yard Field Day. 10-12 PM. Western MD Research & Education Center, Keedysville. Free for BAM members, \$10 for non-members. Register <u>online</u> or call (410) 386-2760.
- **09 Aug.** Beef Webinar: Stockpiling Pasture. 7:30-8:30 PM. Online via Zoom. Free. Register online.
- **16 Aug.** Webinar: Solar on The Farm. 1-2:30 PM. Online via Zoom. Free. Register online.
- 25-28 Aug, Sept I-5, Sept 8-II. Maryland State Fair.

Do you have noxious or invasive weeds on your property?

Harford County's Weed Control Program can help you manage them.

Call Randy Faber at (410) 638-3018 or (240) 755-9280.

August 2022