

# Ag Notes

Harford County Newsletter

UNIVERSITY OF  
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EXTENSION

## October 2021

Happy Halloween



### Hello, Harford County!

University of  
Maryland Extension

Harford County  
Agricultural Center

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M—F 8:00 a.m.—4:30 p.m.

[Extension.umd.edu/harford-county](http://Extension.umd.edu/harford-county)

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It's hard to believe October and fall are here! It's time to bring in the crops and carve a pumpkin! Pumpkin carving has somewhat of an interesting history.

Domesticated pumpkin seeds have been discovered by archaeologists in Mexico and it is believed that the crop originated in Central America some 7,500 years ago. As with most domesticated plants, wild relatives and early cultivated varieties share very little resemblance to what we know today. Early pumpkins were very small, hard fruits with bitter flavor and are believed to be one of the earliest crops grown for human consumption in North America. Over thousands of years of domestication and selective breeding, we now have the pumpkins of today.

Pumpkins come in many shapes and sizes belonging to the genus *Cucurbita*. The most common species of pumpkin is *Cucurbita pepo*, which include the common orange field pumpkin, gourds, summer squash, winter squash, acorn squash, and even zucchini (yes, they are all the same exact species of plant). Other species of pumpkin exist, such as *C. maxima*, *C. argyosperma* (curshaw pumpkins), and *C. moschata* (butternut squash).

Pumpkins didn't become a symbol of autumn and Halloween until immigrants came to the United States to discover that pumpkins made the perfect media for

carving Jack o'lanterns. In Ireland and Scotland, people used to carve scary faces into turnips and potatoes and place them in windows and doors to scare off evil spirits and "Stingy Jack," who was a ghostly figure in an Irish mythical tale and gave rise to the Jack o'lantern. Today, we continue the tradition of carving pumpkins as a symbol of fall and Halloween.

In the United States, the majority of pumpkins are grown in Illinois and are species *C. moschata* used for processed products, such as pumpkin pie filling. Your typical Jack o'lantern style field pumpkins are mostly grown in states such as California, Pennsylvania, Indiana, Michigan, Texas, and Virginia and shipped all over the US. Some 1.5 billion pounds of pumpkins are raised in the US, annually. Pumpkins are a challenging crop to grow and consumers have a very low tolerance for imperfections, and this challenge is compounded here in Maryland where our climate is well-suited for many diseases and pests of pumpkin; however, several local farms raise and sell pumpkins, or offer pick-your-own patches. Check out the Harford Farm Finder app (<https://www.harfordcountymd.gov/1655/Agriculture>) for local farms selling pumpkins this fall!

Have a safe and bountiful harvest season.

Until next time,  
-Andy



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

We are getting several inquiries regarding the invasive spotted lanternfly (SLF). Adults are now active and people are noticing them all over Harford County. If you see this insect, attempt to kill it, then you can report it to the Maryland Department of Agriculture by calling (410) 841-5920, or complete the [online form](#).



**Figure 1.** Spotted lanternfly adults on tree trunk.

Spotted lanternfly adults tend to congregate at the base of trees and move up the trunk (Figure 1). If you have an infested tree, you can make a spotted lanternfly circle trap and place it on the tree (Figure 2). Penn State has a great tutorial on how to construct your own, inexpensive trap: <https://extension.psu.edu/how-to-build-a-new-style-spotted-lanternfly-circle-trap>. In addition, SLF adults are fortunately very easy to kill; horticultural oil or soapy water will do the trick but you must heavily cover the insects with the solution. You will likely have to do repeated applications of product due to the swarming behavior of SLF.

SLF will begin laying egg masses (Figure 3). If you find any, destroy them. You can smash them with the edge of a credit card or knife, or scrape them off into a bag/jar of rubbing alcohol. SLF females will lay eggs on nearly any hard surface, such as tree trunks, stones, walls, fence posts, siding, barrels, firewood, pavers, or even gas cans or the side of a trailer.

This insect is likely here to stay, so if you have a vineyard or an orchard, you'll need to be prepared to scout and treat for SLF next year to manage this pest. Since Pennsylvania has been dealing with SLF since 2014, there are several great resources on Penn State's website: <https://extension.psu.edu/spotted-lanternfly-management-resources>.



**Figure 2.** Spotted lanternfly circle trap.



**Figure 3.** Spotted lanternfly egg masses on tree trunk (left) and wood pallet (right).



## Fall Armyworm Alert: Scout Sod & Pastures

*Kelly Hamby, Extension Entomology Specialist, University of Maryland and David Owens, Extension Entomology Specialist, University of Delaware*

A fall armyworm outbreak is occurring throughout Virginia, Kentucky, and Ohio. This week (9/2), we received a report of armyworm damage to sod from Maryland's Eastern Shore as well as residential lawns in Lewes, Delaware. This appears to be one of the most significant armyworm flights in many years. Scout turf, sod, pasture grasses, any late sweet corn that has not yet headed, and when the time comes, small grain and cover crops. Females lay egg masses containing between 50 and 200 eggs, meaning damage can be localized and intense and that it does not take many moths to infest a field. It is important to catch an infestation as early as possible. Larvae consume 80% of their total intake during the last three days of larval development. Often, it is during this period or just after larvae have finished that damage is noticed, occurring seemingly overnight as if an

army had stripped the field. It takes about 14-19 days for larvae to mature.

Recommendations from southern states that deal with armyworm more regularly are to sample 1 sq. ft, if there are more than 3 armyworms ½ inch long, a treatment is warranted, but if worms are 1 ½" long, they are close to pupating. We have many options for armyworm control in pastures including Pyrethroids, IGRs (ex Intrepid), Diamides (Vantacor and premixes like Besiege), spinosyns (ex Blackhawk) and Lannate. Growth regulators are slow acting, thus are only going to be effective on small worms. Before treating armyworm, remember to read labels carefully; the label is the law.



**Figure 1.** Fall armyworms in grass hay.

## Advanced Grazing School

**October 14-15**

8:00 AM-5:00 PM

Western MD Research  
& Education Center

This advanced grazing workshop will dive deeper into the principles behind grazing economics and increasing farm profitability, giving you the tools and

insights you need to improve your business.

Day 1 (Oct 14th): Three Secrets for Increasing Profits

- Do you own a business or just a pile of assets and a bunch of jobs?
- Setting a profit target and working backwards to achieve it
- Using benchmarks to find profit drivers and dead wood
- Restructuring your operation for profitability

Day 2 (Oct 15th): Cattlemen vs. Grassmen - Economic Leverage of Grazing

- The value of cattle vs. the value of grass
- Stocking rate vs. carrying capacity

- Soil health is the foundation of ag business health
- Applying the 3 Secrets for Increasing Profits into the 5 Cell Grazing Principles

This two-day advanced workshop will be taught by Dallas Mount, one of the experts on the Ranching for Profit team. Dallas has sat at hundreds of kitchen tables and delivered workshops to thousands of ranchers across the US, Canada, and Australia to help them improve the profitability and overall health of their businesses.

The workshop will feature a small group approach with team and class discussions, case studies, videos, constant interaction, and direct application to the participants' own situation to make for a fun and effective learning environment.

The event runs from 8 AM to 5 PM each day. Lunch will be provided each day.

[Register online](#) or contact Amanda Grev, (301) 432-2767.

Beef Producer's Short Course, Series III: Pasture Development and Management

Good pastures are important part to a successful beef operation. This one-day workshop will cover various aspects of pasture development and management in both a classroom style and hands-on outdoor activity. Participants are encouraged to bring fresh plants (weeds, forages, etc.) that they need help identifying, as well as forage and soil analysis reports that they need help interpreting. This course has been approved for Nutrient Management Vouchers and 4 Pesticide Applicator Recertification Credits.

Topics covered: Soil fertility and understanding your soil test data, setting up a pasture system, common forages, weeds and weed management, extending the grazing season - using annuals and cover crops, matching forages with animal nutrition, and cost-share programs.

To participate in the Maryland Beef Producer's Short-Course Series III: Cost \$35, the workshop is open to

the first 30 registrations. [Register online](#) or contact the Extension office for a paper registration form. Several workshop locations are offered across the state (see table below).

This program is supported by the Department of Animal and Avian Sciences, University of Maryland, through an endowment from the Jorgensen Family Foundation.

For more information, visit: <https://ansc.umd.edu/extension/beef-extension/educational-courses#series-iii>

	Date	Location
Western Maryland	Oct 1, 2021	Washington Co. Extension Boonsboro, MD
Northern Maryland	Oct 29, 2021	Harford Co. Extension Street, MD
Southern Maryland	Nov 5, 2021	Charles Co. Soil Conservation Waldorf, MD
Eastern Shore	Nov 19, 2021	Caroline Co. 4-H Park Denton, MD

All programs are 8:45 a.m.-3:30 p.m.

## Winter Extension Meetings

*Erika Crowl, Agriculture Agent Associate  
University of Maryland Extension, Baltimore County*

Fall is officially here, meaning your local Ag Agents are preparing for the 2021-2022 Winter Production Meetings. In August, a survey was emailed and mailed to Baltimore, Carroll, and Harford County farmers asking for your opinion on how you would like the winter meetings delivered. Two questions were asked, "Assuming we can hold meetings in-person, without any COVID restrictions, would you prefer to meeting in-person or virtual?" and "If COVID restrictions are reinstated, such as masking, social distancing, and no food, would prefer to meet in-person (with restrictions) or virtual?" From the 260 respondents, 73% indicated they would prefer in-person meetings if there are no COVID restrictions and there was a near 50/50 split of preferring an in-person or virtual meeting if there are restrictions.

From this data we decided to go ahead with hosting in-person meetings across Maryland as we did prior to COVID while adding virtual meetings as well. Dates for the virtual meetings are still to be determined, but please see the table for in-person meeting dates. If for any reason, we are unable to host meetings in-person due to COVID cases and/or more restrictions are set in place, we will host the meetings virtually. More details are to come and information will be shared in next month's newsletter.

Date	Meeting Name
November 30, 2021	<b>Southern MD Agronomy Meeting</b> Brandywine, MD   4:00pm—8:30pm
December 1, 2021	<b>Washington County Agronomy Day</b> Fairplay, MD   9:30am—2:30pm
December 2, 2021	<b>Northern Maryland Field Crops Day</b> Upperco, MD   8:00am—1:00pm
January 13, 2022	<b>Carroll County Agronomy Meeting</b> Westminster, MD   10:00am—2:00pm
January 19, 2022	<b>Cecil County Agronomy Meeting</b> Elkton, MD   9:00am—3:00pm
January 27, 2022	<b>Central MD Veg Growers Meeting</b> Upperco, MD   8:00am—1:00pm
February 10, 2022	<b>Southern MD Veg &amp; Fruit Meeting</b> Brandywine, MD   8:00am—4:00pm
February 15, 2022	<b>Harford County Agronomy Meeting</b> Street, MD   9:00am—3:00pm
February 16, 2022	<b>Eastern Shore Veg Growers Meeting</b> Location TBA   8:00am—12:30pm
February 16, 2022	<b>Eastern Shore Agronomy Meeting</b> Denton, MD   4:30pm—9:00pm
February 23, 2022	<b>Tri-County County Agronomy Meeting</b> Frederick, MD   8:30am—3:30pm
March 4, 2022	<b>Queen Anne's Agronomy Meeting</b> Centreville, MD   8:00am—1:00pm
March 30, 2022	<b>Lower Shore Agronomy Meeting</b> Princess Anne, MD   10:00am—3:00pm

# Forage Performance of Cereal Cover Crops

Nicole Fiorellino, Extension Agronomist; Louis Thorne, Faculty Specialist; and Joseph Crank, Agriculture Technician Supervisor  
University of Maryland

*\*Editor's note: To download a complete copy of this report, visit <https://psla.umd.edu/extension/md-crops>. Table 1 of this report is included as an insert.*

Dairy farmers are constantly looking for sources of forage to meet their feed needs. One source that many of our region's dairy farmers utilize is the fall planting of cereal grains that are green-chop harvested the following spring. Among the cereal species used for this purpose are rye, triticale, barley, and wheat. Per the Maryland Cover Crop Program guidelines, cereal grains planted as a cover crop prior to November 5 and suppressed via green-chop in the spring are eligible for the grant payment for participation in the Cover Crop Program. In addition, per the Nutrient Management Regulations, a fall application of dairy manure is allowed to a field planted to a cereal cover crop.

Planting a cereal cover crop that will be green chop harvested fits well into the crop rotation used by many dairy farmers. The scenario that many follow is to plant the cereal cover crop following harvest of corn silage. Prior to planting the cover crop, an application of manure is made to the field. The subsequent planting of the cover crop provides incorporation of the manure into the soil. The fall and spring growth of the cover crop is supplied nutrients from the manure. At the same time, the cover crop provides protection to the soil from loss of nutrients via leaching and/or erosion. The objective of this study was to evaluate select varieties of cereal species for cover crop performance and forage production and quality.

Cereal varieties (26) representing three species (rye, triticale, wheat) were evaluated at Central Maryland Research and Education Center – Clarksville Facility. Three replications for each entry were planted using a

randomized complete block experimental design. Planting date was November 5, 2020. Planting was delayed in 2020 due to multiple large rain events. The 3' X 18' plots were planted with a drill with 6-inch spacing between each of the 7 rows. The germination percentage for each entry was used to calculate the seeding rate needed to establish 1.5 million seedlings. Good stands were established in most plots by late fall.

Our goal each year is to time spring biomass harvest with when entries reach late boot to early heading stage of development. We reached this growth stage from late April to mid May in 2021, with three harvest dates to capture the variation in maturity (April 20, May 4, May 14). Each harvest sample was collected by cutting the plants just above ground-level from three center rows of each plot from an area 2.5 feet in length and from two areas within the plot. The samples were placed into cloth bags and dried using a forced air dryer set at 60°C where they remained until sample water content was zero. Each sample was weighed and is reported as pounds of dry matter production per acre (Table 1). Each of the dried samples was ground through a 20-mesh screen using a large plant grinder and the ground biomass samples were sent to Cumberland Valley Analytical Laboratory for standard forage quality analysis.

Cover crop performance is measured by amount of biomass produced and the concentration of nitrogen (N) in the biomass. These two factors were used to estimate N uptake (Table 1). Despite late planting 2020, all varieties amassed good biomass during the growing season. Nitrogen uptake in 2021 was lower than in 2020, but still good, with only two varieties significantly different from the overall mean (one



greater, one less). Several forage quality characteristics for these cereals were measured (Table 1). The descriptions of the various quality characteristics are described here and in the footnotes at the bottom of Table 1. Crude protein (CP) is the N content of the forage, with higher protein representing better feed quality. This value was used to calculate nitrogen uptake of each variety (Nitrogen content = % CP/6.25). Three rye varieties (Aroostook, TriCal Exp 19R01, and the check variety) had significantly greater CP than overall mean, with two triticale varieties (BCT 19004 and Hi Octane) having significantly less CP than the overall mean. Both Aroostook and TriCal Exp 19R01 also had soluble protein and rumen degradable protein (RDP) significantly greater than the overall mean.

Neutral and acid detergent fiber (NDF, ADF) are measures of feed value and represent the less digestible components of the plant, with NDF representing total fiber and ADF representing the least digestible plant components. Low NDF and ADF values representing increased digestibility; ideally NDF values should be <50% and ADF values should be <35%. Our plots were slightly more mature than ideal this year, with overall mean NDF of 60.2% and ADF of 36%. Despite this, one rye variety (KWS Propower) had ADF significantly less than the mean and both Aroostook and TriCal Exp 19R01 had ADF numerically less than 35%, although they likely would have ADF similar to the overall mean of 36%. Aroostook and TriCal Exp 19R01 also had total digestible nutrients (TDN), net energy for lactation (NEL) significantly

greater than the overall mean, indicating good performing varieties. Some good performing wheat varieties included LW2068 and LW2958, which had lower ADF values, low NDF values, high TDN and NEL.

The characteristic that best captures the overall forage quality performance is Relative Feed Value (RFV). An RFV of 100 is defined as the forage value that full bloom alfalfa would have. Two triticale varieties (KWS Propower and Aroostook) had RFV significantly greater than the overall mean (95.0) and over 100. TriCal Exp 19R01 had RFV similar to the overall mean, but combined with the other forage quality factors indicate a good performing triticale variety. Three wheat varieties (LW2068, LW2958, Pioneer 25R25) had RFV significantly greater than the overall mean, and combined with other forage quality factors, indicate good performing wheat varieties.

Though none of these green-chop cereal forages are considered to be adequate as a stand-alone feed for a dairy operation, they can supply a source of forage used in a total mixed ration at the time of year when feed supply may be running short. When this forage benefit is added to the environmental benefit that is gained, planting winter cereal cover crops on a dairy farm can be a win-win decision.

#### Acknowledgements

This work could not be accomplished without the assistance and oversight of all field operations by Mr. Louis Thorne and Mr. Joseph Crank. We acknowledge the assistance of Ms. Shana Burke with seed packaging and harvested sample drying and weighing.

## Equine Needs Assessment Survey

University of Maryland Extension is conducting a survey for research purposes to learn more about the current educational needs of adults interested in the care and enjoyment of horses throughout Maryland. This brief survey will take you less than 10 minutes to complete.

If you agree to participate, please see the link to the survey <https://go.umd.edu/2021MarylandEquineNeedsAssessment>



**2021 Maryland  
Equine Needs Assessment**



**Scan to take the  
Survey**

Your answers are confidential and in no way will your individual answers be identified with you.

By providing us with your feedback, UME will be better able to provide educational programs and services that meet your needs.

If you have any questions or concerns regarding this survey, please Erika Crowl at (410) 887-8090 or [ecrowl@umd.edu](mailto:ecrowl@umd.edu).

## Private Applicator Pesticide Training

**November 16 & 23**

Harford County  
Extension Office  
Street, MD

For those interested in attending in-person training for private applicator certification and recertification, we are holding training dates in

November. Applicators that already have a license and need continuing education credits may attend the two-hour training at the Harford County Extension Office on November 23 from 1-3 pm. Be sure to bring your certification number to get credit. This training is free of charge, but please register ahead of time.

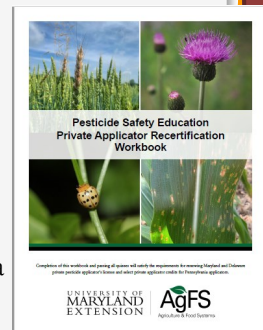
For individuals that need to take the exam to acquire their private applicator pesticide license, an exam will be held at the Harford County Extension Office on November 23 from 9-11 am. Be sure to bring your drivers license for identification. An optional training session to prepare for the exam will be held on November 16 from 1-3 pm at the Harford County Extension Office. Copies of the Private Applicator Core Manual will be available for purchase for \$10. Checks can be made out to "HC EAC."

To register for the exam, new applicator training, or recertification training, please email [akness@umd.edu](mailto:akness@umd.edu) or call the Extension Office at (410) 638-3255.

As a reminder, private applicator credits (as well as nutrient management voucher training) will also be offered at our regional crop production meetings this fall, such as Northern MD Field Crops Day, Harford County Mid-Winter Agronomy Meeting, and the Central MD Vegetable Growers Day. Another option for recertification credits is to complete the Pesticide Recertification Workbook described below.

### Pesticide Recertification Workbook

This workbook is intended to give Maryland Private Pesticide Applicators the recertification training (**4 credits**) needed to renew the applicator's license. Topics covered in this workbook are MDA-approved and are equivalent to two hours of in-person training needed every three years to renew your private applicator's license. This workbook is also approved for **three (3) Delaware credits and two (2) core Pennsylvania credits**. In order to receive credit you must complete the entire workbook. At the end of the workbook you will answer a 30-question quiz and return it to the Baltimore County Extension office.



To order your free workbook, please call the Harford County Extension office at (410) 638-3255.

## Open Nutrient Management Position

WE ARE HIRING

The Baltimore County Nutrient Management Advisor position is open for hire. This full-time position is located at the Baltimore County Extension office in Cockeysville and is responsible for working with Baltimore County farmers to develop nutrient management plans. A bachelor's degree in an agriculture-related field and experience working with farmers is preferred. For complete job description and to apply, visit [ejobs.umd.edu](http://ejobs.umd.edu) and search for posting #[126591](#). Best consideration date is **October 8, 2021**. Several other nutrient management advisor positions are also open around the state and accepting applications.



*Great resources are just a click away!*

*Andrew Kness*

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

University programs, activities, and facilities are available to all without regard to race, color, sex, gender identity or expression, sexual orientation, marital status, age, national origin, political affiliation, physical or mental disability, religion, protected veteran status, genetic information, personal appearance, or any other legally protected class.

If you need a reasonable accommodation to participate in any event or activity, please contact your local University of Maryland Extension Office.

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## Dates to remember

**07 Oct.** [Beef Cattle Webinar Series: Cattle Nutrition 101](#).

7:30 PM. Virtual via Zoom. Register [online](#).

**12 Oct.** [FFA to AGNR Terp Student Info Session](#). 7-8 PM.

Online via Zoom. Free. Register [online](#).

**14-15 Oct.** [Advanced Grazing School](#). 8 AM-5 PM. Western MD Research & Education Center, Keedysville. \$100-\$150.

Register [online](#) or call (301) 432-2767.

**29 Oct.** [Maryland Beef Producer's Short Course](#). 8:45-3:30 PM. Harford County Extension office, Street. \$35. Register online or call (301) 405-1392.

**16 Nov.** New Private Applicator Pesticide Training. 1-3 PM. Harford County Extension office, Street. \$10 for training manual. Register by calling (410) 638-3255 or email [akness@umd.edu](mailto:akness@umd.edu).

**23 Nov.** Private Applicator Pesticide Exam. 9-11 AM. Harford County Extension office, Street. Free. Register by calling (410) 638-3255 or email [akness@umd.edu](mailto:akness@umd.edu).

**23 Nov.** Private Applicator Pesticide Recertification Training. 1-3 PM. Harford County Extension office, Street. Free. Register by calling (410) 638-3255 or email [akness@umd.edu](mailto:akness@umd.edu).

*If you have any questions or require any special accommodations to attend a UME program, please contact the Extension office.*

# October 2021