

Ag Notes

Harford County Newsletter

UNIVERSITY OF
MARYLAND
EXTENSION



October 2024

Happy Halloween!

University of
Maryland Extension

Harford County
Agricultural Center

Suite 600
3525 Conowingo Rd.
Street, MD 21154
(410) 638-3255

M—F 8:00 a.m.—4:30 p.m.

Extension.umd.edu/harford-county
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Hello, Harford County!

Happy fall and happy Halloween! Recent changes in the weather sure make it feel like fall and harvest of corn and soybeans has commenced. A welcome change, although inconvenient for harvest, has been the return of rain after about a 6 week hiatus without any significant rainfall.

Since April 1, we have only had about 18 inches of rainfall, about 7 inches less than the 30-year average for our region and about 2 inches shy of what is considered the minimum amount of rainfall needed to grow corn.

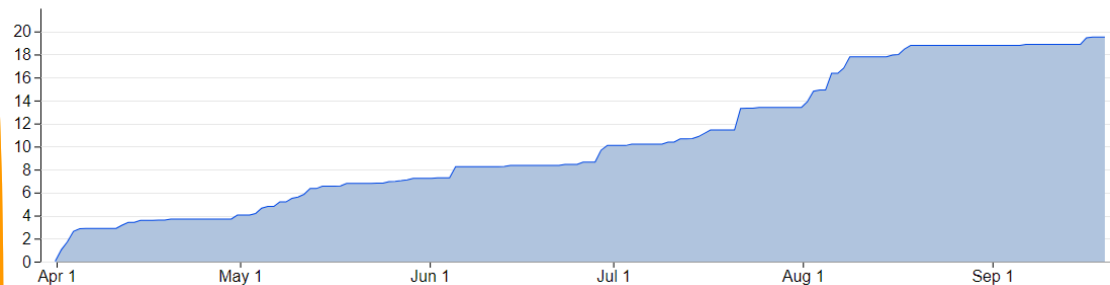
What is interesting about the rain we have gotten this year is how spread out it has been over time. You can see in the graph below all of the slight peaks followed by several weeks of a nearly flat line of no to very minimal precipitation. These prolonged gaps, particularly in June and July, made for some very drought-stressed crops during very important growth stages.

With that being said, early reports of corn harvest show yields far off what we expect in many fields, but in some situations, particularly later planted and longer season hybrids, yields are not as bad as we would expect. This is a testament to the vastly improved genetics of modern hybrids and conservation practices employed by farmers that help build soil organic matter and improve water infiltration, thus making it possible for our soils to hold on to as much water as possible.

The rains are welcome, even if they do interfere with harvest. It will allow later soybean varieties and double crop beans to pack on some extra bushels and recharge the soil for our pastures, hay fields, and just in time to get small grains planted and germinated.

Until next time,
-Andy

Accumulated Precipitation



Ranching for Profit Workshops

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

University of Maryland Extension, the Virginia Forage and Grassland Council, American Farmland Trust, and partners are excited to be bringing back the Ranching for Profit Workshops in both Virginia and Maryland this fall and invite grazers, livestock owners, farmers, and associated industry partners to attend!

The **Ranching for Profit Workshops** will each be held over two days on October 22-23 (Best Western Plus in Waynesboro, VA) and October 24-25 (Garrett College in McHenry, Maryland). from 9 AM to 4 PM each day. These workshops are designed for producers looking to transform their operation into a profitable business with less work and stress. Workshop attendees will dive deeper into the principles behind farm economics and increasing farm profitability, giving them the tools and insights they need to improve their business. Both workshops will cover the same topics; topics covered will include the following:

Day 1 (Oct 22nd/24th): Three Secrets for Increasing Profits

- Setting a profit target and working backwards to achieve it
- Projecting profit or loss using the RFP 7-step profit planning model
- Using benchmarks to identify your profit drivers and find your "dead wood"
- Restructuring your operation for profitability

Day 2 (Oct 23rd/25th): 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

Both 2-day workshops will be taught by Jordan Steele, one of the experts on the Ranching for Profit team and director of operations for Ranch Management Consultants. Jordan grew up on a cow-calf operation near Aladdin, WY before completing his Master's Degree in Agricultural Economics at the University of Wyoming. The workshops will feature a small group approach with team and class discussions, case studies, videos, interactions, and direct application to the participants' own situation. For full details and registration information, please visit <https://vaforages.org/event/2024-ranching-for-profit-workshop/> for the Virginia workshop and <https://go.umd.edu/rfpworkshop> for the Maryland workshop.

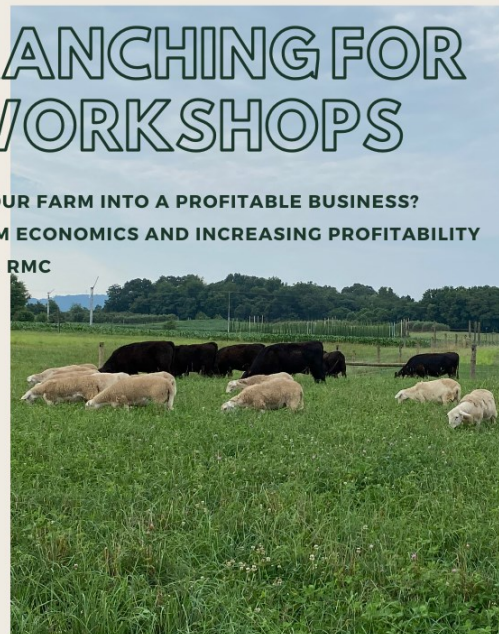
These events are brought to you in partnership by University of Maryland Extension, the Maryland-Delaware Forage Council, the Virginia Forage and Grassland Council, and American Farmland Trust. Thank you to our event partners!

VA-MD RANCHING FOR PROFIT WORKSHOPS

LOOKING TO TRANSFORM YOUR FARM INTO A PROFITABLE BUSINESS?
2-DAY WORKSHOPS ON FARM ECONOMICS AND INCREASING PROFITABILITY
TAUGHT BY JORDAN STEELE, RMC

Virginia Workshop
Hosted by VFGC/AFT
October 22-23, 2024
Best Western- Waynesboro, VA
<https://vaforages.org/events/>

Maryland Workshop
Hosted by UMD/MDFC/AFT
October 24-25, 2024
Garrett College- McHenry, MD
<https://go.umd.edu/rfpworkshop>



University of Maryland is an equal opportunity provider

Listening Session on CAFO Permits

Maryland Department of the Environment [press release](#)

The Maryland Department of the Environment announced a series of four listening sessions will be held in Princess Anne, Easton, Frederick and virtually to receive public input on the next version of a statewide general permit that regulates animal feeding operations.

“We have added an opportunity for public comment before a draft permit is written to maximize transparency for all stakeholders, including farmers and nearby communities,” said Secretary of the Environment Serena McIlwain. “The goal is to develop a permit regulating animal feeding operations that is fair for everyone and ensures healthy products as well as healthy communities.”

Pursuant to the federal Clean Water Act, regulated operations include large poultry houses, dairy farms, cattle operations and other agricultural operations that confine animals. The [current general permit](#) was issued in 2020 with an expiration date of July 7, 2025. Stakeholders will have additional opportunities to comment on actual permit provisions when the draft permit is expected to go to public comment early next calendar year.

This type of permit requires the submission of comprehensive nutrient management plans and steps to be taken to prevent a discharge to waterways. The

regulations and general discharge permit for these facilities are part of a comprehensive statewide effort to address all sources of pollution that can impair Maryland waterways and the Chesapeake Bay. A virtual listening session will be held on Oct. 24. All of the sessions will be held from 5 p.m. to 8 p.m., including:

September 23 – Princess Anne

University of Maryland Eastern Shore, Henson Center Ballroom, 30690 University Blvd S, Princess Anne, MD 21853

October 9 – Easton

Talbot Community Center, Wye Oak Room, 10028 Ocean Gateway, Easton, MD 21601

October 21 – Frederick

Frederick County Government, Winchester Hall, 12 E. Church St, Frederick, MD 21701

Additional information is available on the website at: <https://news.maryland.gov/mde/2024/09/12/listening-sessions-scheduled-to-see-public-input-on-next-statewide-animal-feeding-operations-permit/>

Allium Leaf Miner Active Soon

Jerry Brust, Retired Vegetable IPM Extension Specialist
University of Maryland Extension

If you are growing fall leeks or garlic or other *Allium* species, you need to, for the next month or so (September-first freeze), watch for the tell-tale marks left by Allium leaf miner (ALM). Allium leaf miner, *Phytomyza gymnostoma*, tell-tale marks consist of several small round white dots (made by the female’s ovipositor) in a row that appear on the middle towards the end of leaf blades (Figure 1). If you had some infestation last year you will want to be looking for the signs of this pest now, especially if you grow leeks. When eggs hatch the larvae at first mine leaves and then move down to the bulbs and leaf sheaths where they feed and eventually pupate. The feeding damage can open up the foliage and bulb to fungal infections.

Row covers can be used to exclude this pest when Alliums are first planted. A good insecticide to use for control of the larvae is spinosad (Entrust is OMRI-labelled). Entrust is a translaminar insecticide, which means it will be absorbed into the leaf tissue of the plant and held there in an active state so when larvae feed on the foliage they will contact the insecticide. Two or three applications of the insecticide used 2 weeks apart from each other with the first one coming only after oviposition marks (white dots) are seen should give good control of this pest. The use of a penetrant adjuvant (e.g., neem oil) is recommended for better control of ALM.



Figure 1. Onion leaf blades showing round white dots made by female Allium leaf miners.

Ear and Stalk Rots may be an issue in Corn

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

With the dry then wet (then dry again) weather pattern we had this year, corn went through a lot of stress. Stressed corn is much more susceptible to ear rots and stalk rots. The degree of severity is dependent on a variety of factors, so it is wise to scout fields prior to harvesting in order to identify problematic fields and give those fields harvest priority.

Several different pathogens can cause ear rots in Maryland; the main contenders are listed in the table below. Although they typically do not affect yield, they can cause grain quality issues through the production of mycotoxins. Furthermore, if infected grain is not dried quickly or to a low enough moisture content, infection can spread even when in the bin. Therefore, it is important to scout and identify fields that are infected with ear rots and harvest those first. It is better to pay a few cents in propane to dry the wet grain than to wait and risk infection levels getting worse, and the potential for elevated mycotoxin concentration in the grain. Quickly dry infected grain to 15% for short-term storage and to below 13% for long term storage and it is not recommended to store infected grain for longer than a year. It is important to note that not all ear rotting fungi produce mycotoxins, so I would recommend working with Extension or a crop advisor to get proper identification so that you know the species in question and thus if mycotoxin contamination is a concern.

Stalk rots are also a harvest concern. Like ear rots, stalk rots are also caused by many different pathogens,

several of which are listed in Table 2 below. No single factor causes stalk rots; they are rather the end result of a host of factors that contribute to a net deficit in plant carbohydrates needed for grain fill. The grain fill process is a major carbohydrate sink for the plant. As the plant produces carbohydrates through photosynthesis, it allocates almost all of its carbohydrate production to filling the kernels. A healthy plant will have sufficient leaf area to maximize photosynthesis and can therefore produce enough carbohydrates to fill the grain. However, when photosynthetic leaf area is compromised, the plant cannot make enough food to fill the kernels. In order to compensate for the deficit, the plant cannibalizes carbohydrates from existing tissues and organs. The first tissues to go are the stalks, which are then easily compromised by stalk-rotting pathogens. Stalk rot is a byproduct of stressed plants during the growing season, particularly during grain fill.

Any factor that reduces leaf area or reduces photosynthesis after pollination will predispose plants to stalk rots. These include reduced leaf area through insect feeding, lesions from foliar diseases, or mechanical damage (such as hail). Other factors include inadequate fertility, water stress, and excessive plant populations. Another significant factor is hybrid genetics; both resistance ratings to stalk rotting pathogens as well as ear and kernel size. High-yielding, large kernel hybrids are more susceptible to stalk rots if they are not kept healthy through grain fill.

Scout fields for stalk rots as early as black layer. The “pinch test” is one way to scout for stalk rots. Pinch the

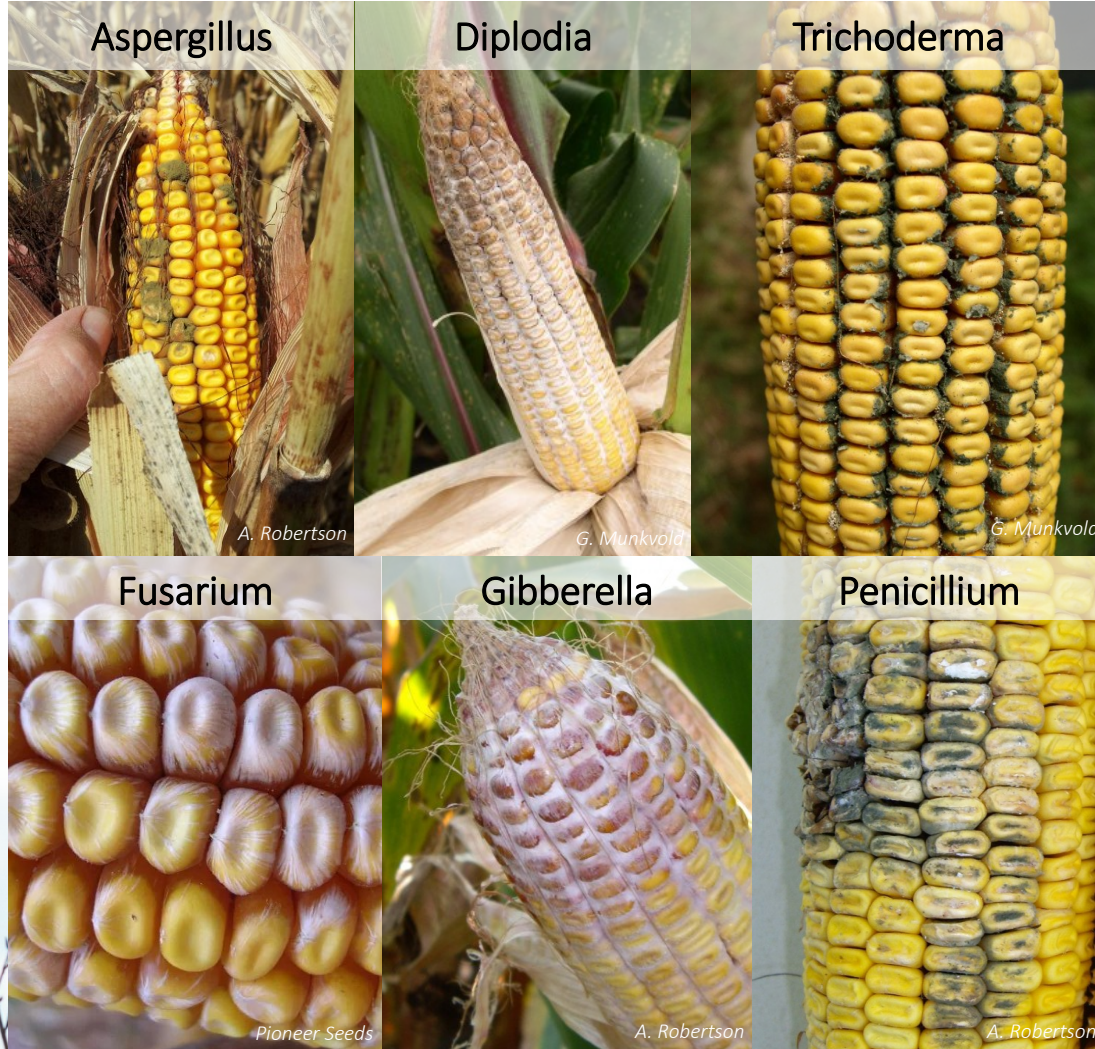
Table 1. Common ear rots of corn.

Disease	Pathogen	Symptoms (see next page for pictures)	Mycotoxin
Fusarium ear rot	<i>Fusarium verticillioides</i>	“Starburst” kernels, white kernels, infected kernels may be scattered on ear	Fumusin
Gibberella ear rot	<i>Fusarium graminearum</i>	Ear covered in white mat often with pink hue, infection starts at tip and can progress to butt end of ear	Vomitoxin (DON)
Diplodia ear rot	<i>Stenocarpella maydis</i> and <i>S. macrospora</i>	White fungal mat on ear, may cover the entire ear	None
Penicillium ear rot	Several <i>Penicillium</i> species	Blue-grey spores on kernels developing on damaged ears (hail, deer feeding, insects, birds, etc.), may infect the germ of the kernel	Some species may produce mycotoxins
Trichoderma ear rot	<i>Trichoderma viride</i>	Green spores in between kernels	None
Aspergillus ear rot	<i>Aspergillus flavus</i>	Olive green spores on ear, usually starting at tip, associated with damaged ears (feeding from insects, deer, birds, etc.)	Aflatoxin

5 stalk in between the nodes at one of the lower two nodes. You should not be able to pinch healthy stalks, but rotted stalks will fairly easily collapse. Do this at several random locations to assess the field. Alternatively, you can do a “push test,” which involves pushing the corn stalks approximately 30 degrees from horizontal (8 inches laterally) at a height of about eye level. Healthy stalks will return to vertical while infected plants will not. If more than 10% of plants tested exhibit stalk rot symptoms, you may want to harvest as soon as possible or risk a not-so-fun harvest of lodged corn.

Table 2. Common stalk rots of corn.

Disease	Pathogen
Anthracnose stalk rot	<i>Colletotrichum graminicola</i>
Diplodia stalk rot	<i>Stenocarpella maydis</i>
Charcoal rot	<i>Macrophomina phaseolina</i>
Gibberella stalk rot	<i>Fusarium graminearum</i>
Fusarium stalk rot	Multiple <i>Fusarium</i> species



Cost-Share for Manure Transport and Injection

Maryland Department of Agriculture [press release](#)

The Maryland Department of Agriculture is reminding farmers that cost-share funding is available to help cover expenses associated with hauling all types of manure to fall-planted crop fields with acceptable soil phosphorus levels. Additionally, grants are available to offset costs related to injecting liquid manure into the soil in order to prevent nutrient runoff and reduce odors.

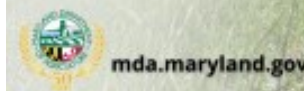
All fall manure transport and injection projects must be completed by **December 15, 2024**. Claims for payment should be submitted to the department's [Conservation Grants Office](#) by **January 15, 2025**.

Program highlights include:

- Receiving farms/businesses can receive up to \$28/ton to transport poultry manure to qualifying fields with acceptable soil phosphorus levels or alternative use projects that can use or temporarily stockpile the product safely
- Cost-share grants to transport dairy and livestock manure to qualifying fields cover up to 87.5% of eligible costs
- FastTrack and standard transport options are available for both poultry and dairy/livestock manure
- Farmers can receive up to \$45/acre for costs associated with injecting liquid manure into the soil. Please note that poultry manure is not eligible for this option due to its low moisture content

Fall Manure Transport and Injection Grants Available

Available



mda.maryland.gov

FastTrack (haul now, apply later) applications for poultry and dairy/livestock manure can be downloaded from https://mda.maryland.gov/resource_conservation/Pages/manure_management.aspx. For special circumstances where applicants are not eligible for FastTrack grants, farmers should contact their [local soil conservation district](#) to apply for our standard grants. These grants require pre-approval before manure is transported or injected.

The department's Conservation Grants Program administers manure transport and injection grants. Applicants must be in good standing with the program and in compliance with Maryland's nutrient management regulations. Use the "<https://litr.io/>" website to find manure or contact a poultry manure broker at https://mda.maryland.gov/resource_conservation/counties/ManureBrokers_FINAL.pdf.

For more information, please contact the Manure Management Program at (410) 841-5864.

Pesticide Training Dates

We will be hosting private pesticide applicator training at the Extension office (3525 Conowingo Rd, Street, MD 21154) the fall and winter. Dates and times are listed below. There is no fee to attend the classes, but please register ahead of time to ensure accurate headcount for educational materials. Please call the Extension office to register, (410) 638-3255, or email akness@umd.edu.

Private Applicator Recertification Training (4 CEUs in category PVT for private applicator renewal). As a reminder, if your license expires in December of 2024, you will need 4 CEUs by spring 2025 in order to renew your private applicator license.

- November 14, 2024 | 1-3:00 p.m.

- March 13, 2025 | 1-3:00 p.m.
- Credits will also be offered at Northern Maryland Field Crops Day (December 5), Central MD Vegetable Growers Day (January 22), and the Harford County Mid-Winter Agronomy Meeting (February 11).

Optional Private Applicator Prep Course and Exam. \$20 for a hard copy of the *Maryland Private Applicator Core Manual* study guide.

- November 5, 2024 | Prep for Exam | 9-11:00 a.m.
- November 14, 2024 | Exam | 9-11:00 a.m.
- March 6, 2025 | Prep for Exam | 9-11:00 a.m.
- March 13, 2025 | Exam | 9-11:00 a.m.

Mycotoxin Testing

Maryland Department of Agriculture and University of Maryland Extension press release



The Maryland Department of Agriculture and the University of Maryland Extension is reminding Maryland farmers Mycotoxin (aflatoxin, fumonisin, vomitoxin, etc.) testing is offered at no cost to farmers for corn, wheat, oats, rye and other grains. Screening includes testing for nitrate and prussic acid in forage and mycotoxins, all of which can have negative effects on livestock growth and performance. The program is a cooperative effort between the Department and Extension and testing is conducted by MDA's State Chemist Section.

"The department offers many services to farmers through our programs, including this test that screens for these toxins," said Maryland Department of Agriculture Secretary Kevin Atticks. "I encourage farmers to take advantage of this testing to assist in assuring grains being sold in Maryland are safe"

Farmers interested in testing should contact their local [Extension office](#) for assistance to ensure proper protocol for sample collection and preparation. Farmers will submit samples to Extension, who will facilitate transportation to the department. The State Chemist Lab will then analyze for aflatoxin, fumonisin, ochratoxin, T2H2 toxin, vomitoxin, and zearalenone and forage samples for either nitrates or prussic acid. Results from the department will then be sent by Extension to farmers within 24-48 hours with guidance for interpreting the findings.

For more information please contact the Maryland Department of Agriculture's State Chemist Tom Phillips at (410) 841-2721 or via email, tom.phillips@maryland.gov.

Food Waste Donations for Livestock Feed

The Hope Center, a food donation center located at 2845 Churchville Road in Churchville, would like to begin an effort to offer unused donations to local farmers for animal feed. Some of the foods donated regularly are Chick-fil-A chicken nuggets/patties, canned and fresh fruits and vegetables, bread, cereal, crackers, and yogurt. Items and quantities will vary from week to week and farmers are asked to come to the Center to pick up the food, and to bring their own 5 gallon buckets, bags, or boxes to be used for food transport.

Farmers who are interested in picking up the excess food are asked to text Robert at (443) 787-9290 with their interest and contact information (name and cell number). He will create a text group to be used to message donation details directly to farmers on a weekly basis.

The first pick-up date will be Monday October 7th from 1-2 p.m. After the first pick-up, regular donation days/times will be: Mondays and Thursdays from 1-2 p.m., first come first serve.



Great resources are just a click away!

Andrew Kness

Andrew Kness
Senior Extension Agent,
Agriculture and
Food Systems



[facebook.com/HarfordAg](https://www.facebook.com/HarfordAg)

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 the University of Maryland Extension office at least two weeks prior to the event.

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Harford County Newsletter

Dates to remember

- 08 Oct.** Women in Ag Webinar: How to Interpret a Soil Test Report. 12 noon. Free. Register [online](#).
- 05 Nov.** Optional Pesticide Exam Prep Class. 9-11 AM. Harford County Extension office. \$20 for textbook. Call (410) 638-3255 or email akness@umd.edu to register.
- 14 Nov.** Pesticide Exam. 9-11 AM. Harford County Extension office. Free. Call (410) 638-3255 or email akness@umd.edu to register.
- 14 Nov.** Private Pesticide Applicator Recertification Training. 1-3 PM. Harford County Extension office. Free. Call (410) 638-3255 or email akness@umd.edu to register.
- 19-21 Nov.** Mid-Atlantic Crop Management School. Princess Royale Hotel, Ocean City, MD. Prices vary. Register at go.umd.edu/24crop.



DISCOVER AGNR
PROSPECTIVE STUDENT INFORMATION SESSIONS
Join us to learn more about AGNR and the opportunities that await you as a Terp!

Friday, September 27, 10:00AM-11:30AM
Monday, October 7, 2:00PM-3:30PM
Monday, October 14, 1:00PM-2:30PM
Friday, October 18, 10:00AM-11:30AM
Monday, October 21, 2:00PM-3:30PM
Saturday, October 26, 11:00AM-12:30PM

Register at
go.umd.edu/futureagnr

COLLEGE OF AGRICULTURE & NATURAL RESOURCES

October 2024