

Ag Notes

Harford County Newsletter

UNIVERSITY OF
MARYLAND
EXTENSION



September 2018

The Extension Office will be closed on
September 4 for Labor Day

University of
Maryland Extension

Harford County
Agricultural Center

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M—F 8:00 a.m.—4:30 p.m.

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Hello, Harford County!

Can you believe fall is knocking on our door?! It seems like just yesterday we were fighting the torrential downpours as we tried getting the 2018 crop in the ground. Like most years, 2018 has been full of challenges. The wet spring delayed planting by several weeks, and countless acres had to be replanted. With all the rain in the beginning of the year, dry weather was a welcome change of pace; but unfortunately it got a bit too dry in mid summer as most corn was pollenating. This unfortunate timing likely further reduced yields. The second spell of wet weather during the beginning of August was unfortunately timed as well, causing ideal conditions for disease in our corn and soybean crop, not to mention all the flooded pasture ground. I think we can expect a lot of variation in yields this year. Hopefully Mother Nature will cooperate and give us a somewhat normal fall weather pattern for a change.

There have also been a few changes in the Extension Office. As I'm sure many of you know by now, August 31 marks the end of an era for Harford County Extension. After a long career of employment with the University of Maryland Extension, Harford County Office, Cynthia Warner will retire September 1 as our county's 4-H Extension Educator. Over 24 years of service! Prior to her employment in the office, Cynthia was Easy Riders 4-H Club's first club leader! She has taught hundreds of camp counselors; officiated many MD State Fair Dog Shows; judged Record Books galore; chaperoned out-of-state trips; flew



"Happy Trails" and Disney was the theme of our sendoff luncheon for Cynthia and Vigi (hence the cowboy hats, bandanas, and Mickey ears!).

to Germany to help facilitate 4-H programming at several Garrisons; influenced many 4-H'ers, volunteers and alumni; and hosted 4-H Day in Annapolis since its first year. Cynthia has not only been the 4-H Educator, she's been the County Extension Director and interim Ag Agent liaison during vacancies. Her hats have been many as well as her vast collection of 4-H shirts! She is a true Ambassador of the 4-H program!

We also bid farewell to our FSNE nutrition educator, Vigi Zabala. Vigi will be moving back to her home state of Florida where she will be working as a family and consumer sciences educator for Florida Extension. Best wishes to Vigi and Cynthia on their new adventures!

If you're interested in applying for any of our open positions, keep an eye on our career's website, ejobs.umd.edu.

Have a safe harvest!

Until next time,

-Andy

Wheat Variety Trials

Results from the [2018 Maryland wheat variety trials](#) have been posted. Wheat yields and quality were lower than average due to scab that was widespread across the state. For evaluating variety resistance to scab (*Fusarium* head blight), check out the data from our [misted nursery](#), which is an assessment of how susceptible select varieties are to scab. Variety resistance to scab should be an important factor when selecting your 2019 wheat varieties.

Results for the 2018 trials are summarized below, but you should reference the entire reports linked above to make the proper variety selection. Contact the extension office for a hard copy, or if you would like assistance interpreting any of the data. Additional regional data sources for variety trials are also available from [University of Delaware](#), [Penn State](#), and [Virginia Tech](#).

Top 5 Yielding Varieties (statewide average)			Top 5 Lowest DON Levels (from misted nursery)		
Brand	Variety	Average yield	Brand	Variety	DON (ppm)
UniSouth Genetics	USG3316	80.2 bu/a	AgriMAXX	463	12.3
AgriMAXX	463	79.2 bu/a	Eddie Mercer Agriservices	MBX-18-A-237	12.6
UniSouth Genetics	USG3228	78.0 bu/a	Eddie Mercer Agriservices	MBX17-P-275	12.9
Eddie Mercer Agriservices	MBX19-P-275	77.7 bu/a	Mid-Atlantic Seeds	MAS67	13.4
Mid-Atlantic Seeds	MAS86	77.0 bu/a	AgriMAXX	480	14.5

Scouting & Estimating Corn Yields

Jarrod Miller, Extension Agronomist
University of Delaware

Although corn is still undergoing grain fill in many Delaware fields, estimates of yield can be performed right now. The [University of Kentucky](#) has several methods for estimating yield, depending on the amount of information you have on hand. Since these methods involve counting kernels and rows on a few ears, you will need sharp eyes and the ability to keep your place (a Sharpie can come in handy for this).

Our variety trials in Georgetown were planted on May 2nd, so they have gone through the deluge of rainfall, as well as the droughty conditions during pollination. The earlier maturing varieties (110 days) were tasseling a little ahead of the later maturity (115 days) in the trials, during higher night and daytime temperatures. There could be many variables besides temperature that explain yield loss, including fertility, compaction and flooding. Actual ear size is determined during the vegetative stages, and also needs to be

considered. However, by scouting fields right now, you can at least eliminate if your issues were during the reproductive states. Tipback will be common, where kernels were either not pollinated or aborted. Pollination occurs at the bottom of the ear first, so the most likely loss of kernels is at the tip.

Based off counting rows and kernels, we did observe a difference in potential yield between the early, mid and late maturing varieties. The early and mid-maturities (110-112) both had yield estimates of 150-240 bu/acre, while the later maturity (115) was statistically higher at 185-290 bu/acre. Again, temperature alone does not explain the difference; it could also just be the hybrids. If weather is the issue, it is hard to control, but if it turns out fertility, disease or hybrid selection was the issue, we have a little more control when planning for next year.



Pesticide Training Dates

October 9 & 16

Harford County
Extension Office
Street, MD

Training for private pesticide applicators will be given through the Harford County Extension Office on October 9 and 16. Optional training class for new applicators will be from **9-11AM** on **October 9**, with exam on **October 16, 9-11AM**. Cost for the new certification class will be **\$7**, which includes your own copy of the Maryland Pesticide Core Manual to use as a study guide for the exam.

Recertification training will be offered on **October 16** from **1-3PM**. Credits will satisfy Maryland continuing education credits (CEUs) necessary to renew your private applicator license. There is no cost for this class, but please register ahead of time.

Please call the Harford County Extension Office to register (410) 638-3255, or e-mail akness@umd.edu. For a list of additional training dates, call the extension office, or visit the Maryland Department of Agriculture [website](#).

Chlorpyrifos Ban

*Peter Coffey, Agriculture Agent Associate
University of Maryland Extension, Carroll County*

In Early August, a federal appeals court ordered the Environmental Protection Agency (EPA) to ban the pesticide chlorpyrifos, the active ingredient in several insecticides, including Lorsban and Dursban. Chlorpyrifos is an organophosphate (OP), which was first introduced to the market in 1965 by Dow Chemical, and was one of the most widely used OPs in the country until 2001, when the EPA phased out homeowner use because of health concerns. It is still one of the most widely used OPs in agricultural use, so its ban will affect farmers nationwide.

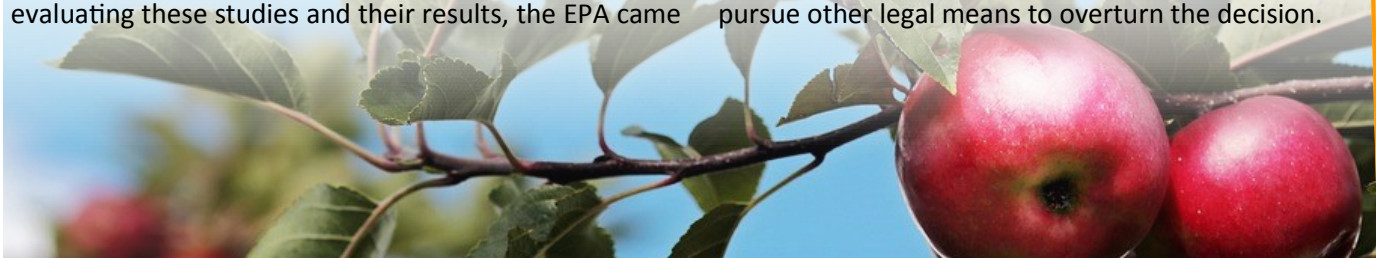
Over a decade ago, the EPA's position was that on farm use of chlorpyrifos posed little risk to consumers. Organophosphates act by preventing nerves from firing, shutting down the nervous systems of insects. The amount found in food is not considered high enough to affect human nervous systems in that way. However, about 10 years ago scientific studies examining the effects of low levels of exposure to children and fetuses found that there may be effects to the growth of the brain.

One of these studies, by researchers at Columbia University, examined the levels of chlorpyrifos in the blood of infants. They found that by the time the infants were 7 years old, children that had been exposed to higher levels of chlorpyrifos scored lower on IQ tests. Other studies showed that genetics can affect how sensitive some people are to chlorpyrifos. After evaluating these studies and their results, the EPA came

to the consensus that there was no practical safe level of residues, and as the former assistant administrator Jim Jones puts it: "it became, in my view, a very straightforward decision, with not a lot of ambiguity in terms of what [the EPA] would do."

The EPA proposed a complete ban in 2015, which was opposed by Dow Agrosiences who claimed there was still too much controversy in the research to move forward with a ban. The EPA was required to make a final decision by March 31 of 2017, and in a surprise decision the administrator at the time, Scott Pruitt, announced that there would be no ban. Pruitt was appointed by President Trump, and has recently resigned amid allegations of wild spending of federal money and ethical abuse.

The U.S. Court of Appeals for the 9th Circuit heard the case against the EPA. The EPA has a duty to ensure that there is a "reasonable certainty that no harm will result" from the use of a pesticide. Federal Appeals courts consist of 3 judges and the ruling was 2-1. Judge Jed Rakoff, said that "the EPA presents no arguments in defense of its decision. Accordingly, the EPA has forfeited any merits-based argument." The Agency, now headed by acting administrator Andrew Wheeler, has 60 days to enact the ban, but is still reviewing how they will move forward. DowDupont has stated they "will continue to support the growers who need this important product," and that they will pursue other legal means to overturn the decision.



USDA Trade Aid

From Maryland Grain Producers Newsletter

U.S. Secretary of Agriculture Sonny Perdue today announced details of actions the U.S. Department of Agriculture (USDA) will take to assist farmers in response to trade damage from unjustified retaliation by foreign nations. As announced last month, USDA will authorize up to \$12 billion in programs, consistent with World Trade Organization obligations. Initial payment rates will be: Corn – \$0.01/bu, Soybeans – \$1.65/bu, Sorghum – \$0.86/bu, Wheat – \$0.14/bu, Dairy (milk)—\$0.12/cwt. These initial payment rates will be based on 50% of production. A second payment rate may be announced later for the remaining 50%. Payments will be capped per person or legal entity at a combined \$125,000 for corn, sorghum, soybeans and wheat.

Interested producers can apply after harvest is 100 percent complete and they can report their total 2018 production. Beginning September 4th of this year, MFP applications will be available [online](#) or by contacting your local FSA office. Producers will be able to submit their MFP applications in person, by email, fax, or by mail.

Eligible applicants must have an ownership interest in the commodity, be actively engaged in farming, and have an average adjusted gross income (AGI) for tax years 2014, 2015, and 2016 of less than \$900,000. Applicants must also comply with the provisions of the “Highly Erodible Land and Wetland Conservation” regulations. On September 4, 2018, the first MFP payment periods will begin. The second payment period, if warranted, will be determined by the USDA.

Potomac Horse Fever Detected in Maryland

Maryland Department of Agriculture [News Release](#)

The Maryland Department of Agriculture received confirmation of a case of Potomac Horse Fever in a pony stabled in Frederick County from the University of Kentucky’s Equine Diagnostic Laboratory on August 2. The pony fell ill on July 26 and did not respond to treatment. The gelding died on July 30. A necropsy of the pony was performed at the Frederick Animal Health Laboratory on July 31.

The Maryland Department of Agriculture is urging horse owners — especially those with horses that graze near rivers, streams and creeks — to watch their horses closely for signs of this disease. Clinical signs include mild to severe fever, diarrhea, dehydration, loss of appetite, laminitis and mild colic. Potomac Horse Fever is most commonly contracted by horses that ingest infected aquatic insects such as caddisflies, mayflies and dragonflies.

“Potomac Horse Fever surfaces in Maryland every few years,” said Maryland Department of Agriculture’s State Veterinarian Dr. Michael Radebaugh. “With this summer’s heavy rains, pastures and meadows where equines graze are more likely to flood, increasing the chances that a horse could ingest these infected aquatic insects.”

Equine owners are encouraged to keep horses off of flooded pastures, and to turn stable and barn lights off

at night since the aquatic insects that carry this disease are attracted to bright light.

Potomac Horse Fever has a mortality rate of 5 to 30 percent in equines. Since there are 14 different strains of *Neorickettsia risticii*, the organism that causes Potomac Horse Fever, the vaccine is not always effective, but may lessen the severity of the disease. Horse owners are advised to follow the recommendations of their private practitioner concerning vaccination protocols.

The incubation period for the disease is one to three weeks. The department encourages horse owners to contact their veterinarian as soon as possible if their equines are showing symptoms of this infection, even if the horse has been vaccinated. Most horses infected with Potomac Horse Fever will respond to treatment with antibiotics.

Potomac Horse Fever cannot be transmitted from horse to horse, and humans are not at risk; however, veterinarians who diagnose this disease must report it to the Maryland State Veterinarian Dr. Radebaugh at (410) 841-5787 or michael.radebaugh@maryland.gov.

For more information about Potomac Horse Fever, please visit: <http://www.aaep.org/info/potomac-horse-fever>.

Soil Compaction When Grazing in a Wet Summer

*Sjoerd Willem Duiker, Professor of Soil Management & Applied Soil Physics
Penn State University*

**Editor's Note: Thoughts from Penn State soils professor, Dr. Duiker, regarding soil compaction after grazing in a wet summer. Penn State experienced a very wet spring and mid-summer, just as we did.*

Last week at Ag Progress Days I participated in a Management Intensive Grazing demonstration with USDA-NRCS Grazing and Soil Conservation Specialists. It rained much of Tuesday, after which it became sunny on Wednesday and was dry on Thursday. The soil of our grazing demo was an Andover poorly drained channery silt loam soil on an 8-15% slope. This soil has a shallow fragipan which is almost impervious to water, so it has a seasonally high water table. In fact, water was still standing in some pockets of the field while cattle were grazing. Half of our field was in a tall fescue/orchardgrass sod that had been in place for many decades, while others were sod that had been terminated last year and planted in summer annuals for our demonstration. We managed this half as no-till. In early July of last year we planted a highly diverse mixture of summer annuals in this field (Iron and Clay Cowpeas, AS 6501 Sorghum Sudangrass, Daikon Radish, Wonderleaf Hybrid Pearl Millet, AS6401 Sorghum Sudangrass, Peredovik Sunflower and T-Raptor Hybrid Brassica), which was followed by a spring triticale/spring pea mix this spring that was terminated with glyphosate, after which we planted different summer grazing mixes in this field.

Here are some of the take home lessons for managing soil compaction when grazing in a wet summer:

- Keep the animals on a hard surface area (or, less desirable, a sacrifice lot) and feed them hay if you are not able to move them frequently during excessively wet conditions. However, remember that the cost of feeding hay is at least twice that of grazing, so it pays to maximize grazing.
- Move the animals frequently. By leaving the animals in an area for only a short time using temporary fencing you limit hoof impact. We noticed more damage as the cows went over the same area multiple times. By moving the animals every three hours and excluding them from the previously grazed area by backfencing, we were able to graze even when it was raining without excessive damage to the field. We also moved the water, so the animals did not have to go back to the same spot to drink. When the rain stopped, and the

field dried out, we could move them less frequently.

- Put the animals on tall fescue when it is wet. The old tall fescue/orchardgrass mix was able to sustain animal impact much better than the annuals we had planted. Although tall fescue has gotten a bad reputation due to endophyte infection, it can be your saving grace in a wet spell. Tall fescue has a very robust root system that holds up the animals. If you offer the fescue with other species such as orchard grass the animals graze it well.
- Use permanent no-tillage. As soon as the surface dried out on the second day of our demonstration we were able to graze the annuals without very detrimental effects on the soil. By using no-tillage we were able to maintain the granular soil structure that had developed under decades of sod. If you grow annuals that winterkill, it is important to plant a cover crop to always maintain a living root system in the soil.
- Rotate annuals with perennials. We typically assume 40% of the total plant mass of a perennial is below the ground, while it is 20% for annuals. The bigger root mass helps improve the soil and limits the impacts of compaction in the rotation.
- Don't overgraze. While there are differences of which metric to use, all grazing specialists agree that you should leave adequate leaf area for regrowth. This helps strengthen the root system. We typically use the rule of graze half, leave half, while others may graze to a certain height such as 4 or 5 inches. The animals may trample part of the biomass onto the soil surface and this is fine because it will recover or become food for the biological organisms in the soil.
- Use long rest periods. Before you send the animals in again, wait at least 20-30 days until you have a vigorous stand again (monitor the vegetation).
- Manage the belowground herd. By taking care of your soil first you can make it more resilient, so it withstands compaction better and it also recuperates better. We noticed tons of earthworm middens in the field that will do their tunneling and processing of soil, for example, to make the soil porous and crumbly again.

Fall Nutrient Management Updates

Working with cost-share? Complete the following two steps to qualify.

1. Make sure you have a current Nutrient Management Plan.
2. Ask your Nutrient Management Advisor for a "Current Nutrient Management Plan Certification" form. This form will give the beginning and end dates of your last plan and the Nutrient Management Advisor will sign the document as verification. This will have to be submitted to Soil Conservation prior to receiving cost-share funding.

Manure analysis rules have changed. In the past, anyone who collected and spread manure had to have a manure analysis each year. That rule still holds for most operations. However, if you have fewer than 20 animal units (AU) you will want to talk with your advisor before getting manure analyzed. Folks with typical farm animals and less than 20 AU may now use book values instead of yearly manure analyses. Please note: one AU = 1000 pounds. Your Nutrient Management Advisor can calculate this for you.

Maryland Department of Agriculture (MDA) identification number. At the top of your Annual Implementation Reporting Form (AIR) you will see an MDA Operator Number. That number is important for MDA in processing data. Please, give a copy of your AIR to your Nutrient Management Advisor so they can include this number in the computer data base.

If you have questions, please feel free to call the Extension Office.

Fall Nutrient Management Application Rules

Now that summer is winding down, it's time to look ahead to Maryland's fall nutrient application dates which run from **September 10 through December 15**. Here are the rules:

- Farmers are required to plant cover crops on fallow fields where organic nutrient sources have been applied in the fall. The planting deadline is November 15. Organic nutrient sources may be applied between November 16 and December 15 to cover crops and other vegetative cover that have been previously planted.
- A fall application of an organic nutrient source (not poultry litter) may be made to an existing crop, a crop to be planted during the fall, or a crop to be planted the following spring before June 1 following crop fertility recommendations provided in the Maryland Nutrient Management Manual. If imported organic sources are used, a Fall Soil Nitrate Test (FSNT) must be taken in advance to determine if additional nitrogen is warranted for a commodity small grain crop.
- Poultry litter may be applied in the fall for an existing crop or crop to be planted in the fall. If the crop to be planted will be harvested as a small grain crop for commodity purposes, a FSNT must be taken to determine if it is eligible to receive nitrogen.
- A fall application of a chemical fertilizer may be made to an existing crop or crop to be planted during this time period based on crop fertility recommendations provided in the Maryland Nutrient Management Manual.
- REMEMBER...nutrient applications are prohibited during the fall application period when the soil is saturated, when the ground is covered with snow greater than one inch, or when the ground is hard-frozen greater than two inches. For more information, contact MDA's Nutrient Management Program at 410-841-5959.

How to Write a Nutrient Management Plan

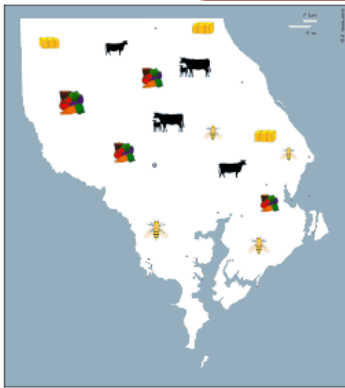
The Maryland Department of Agriculture and University of Maryland Extension will offer two, one-day workshops titled, *How to Write a Nutrient Management Plan*. The first workshop will be held September 21, 2018 at the **Montgomery Extension Office** in Derwood, and the second workshop will be held September 28, 2018 at the **Wye Research and Education Center** in Queenstown. Workshops are designed for people who are new to the plan-writing process. Participants earn six credit hours toward the Maryland Nutrient Management Program's continuing education requirement. **Register before September 15**—\$20 check or money order, payable in advance. This non-refundable fee covers learning materials and lunch. Please complete the [registration form](#), or contact the extension office for a hard copy.

September 21 or 28

9:30-3:30 PM

Montgomery Co. Extension Office or
Wye Research & Education Center

Harford County Agriculture Awareness GIS Project



In an effort to get the community aware of those farmers who bring food and other products to our tables whether locally or commercially, a collaboration between Harford Community College and several Harford County Agricultural Agencies has

started in order to create a virtual geographic system. This system will allow community members to easily find agriculture-related products in Harford County through an append website system. This application will

also serve as a marketing opportunity for those farmers in Harford County who depend on local buying and selling as a source of income.

To be placed on the map, you need to identify as a farm by Harford County and have to be willing to answer a few questions regarding your operation. You can have a discussion on the phone with Ellie Daney or with the future student(s) at North Harford High School, who will be helping to complete this project. Students in the Magnet Program at North Harford will be taking over the majority of the project in the Fall as an educational tool for understanding GIS mapping.

Questions/Concerns? Contact Ellie Daney via e-mail (ellie4@vt.edu) or visit the Agriculture Center.

2018 Farm Bill Online Guide

University of Maryland Extension has set up an online guide to help you follow and understand changes to the 2018 Farm Bill. The website can be accessed at: <http://www.arec.umd.edu/extension/2018-farm-bill-guides>.

The House and Senate have passed their respective Farm Bills and the members of the conference committees have been chosen. As we await the first conference committee meetings in early September, we will be posting guides to help readers understand proposed changes to the Farm Bill, differences between the House and Senate versions and how these changes or differences can practically impact you and/or the population you serve.

Check back to this page regularly as we update this site throughout the month and also for news developments from the conference committee.



Free Berry & Peach Promotional Materials



The Maryland State Horticultural Society received funding from two specialty crop block grants and have promotional materials available to Maryland berry and peach producers. Items include but are not limited to the following: recipe tear pads, vinyl indoor/outdoor banners, nutrition brochures, and kid's activity booklets. To order the berry items, click [here](#). To order the peach items, click [here](#). Contact the Maryland Horticultural Society if you have any questions: (240) 409-7491 or (410) 489-7034.



Great resources are just a click away!

Andrew Kness

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Back-issues of this publication can be found at: <https://extension.umd.edu/news/newsletters/657>

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Dates to remember

- 6 Sept.** Cultivate Baltimore: Farm equipment inside high tunnels. 5:30-7:30 PM. Baltimore, MD. \$10. Register [online](#) or contact Neith Little (410) 856-1850.
- 7 Sept.** Pesticide container recycling. 9-3 PM. Scarboro Landfill, Street, MD. See [webpage](#) or contact Wendy Doring for instructions (410) 638-3417.
- 7 Sept.** Harford County Farm Bureau Picnic. 6:30 PM. Clear Meadow Farm, White Hall, MD.
- 12 Sept.** Women in Ag Webinar: Soil Maps for Production Agriculture. 12 PM. Free. Register [online](#).
- 12 Sept.** Practical Experiences in Agronomy. 9:30-2:30 PM. Central MD Research & Education Center, Ellicott City, MD. \$30. Register [online](#) or call (410) 841-5959.
- 13 Sept.** Maryland Crop Insurance Workshop. 8:30-3:30 PM. Comfort Inn, Bowie, MD. Free. Register [online](#) or contact Paul Goeringer (301) 405-3541.
- 16 Sept.** Farm Visitation. 1 PM. Clear Meadow Farm, White Hall, MD. Contact Alice Archer for details: (410) 836-7773.
- 21 Sept.** How to Write a Nutrient Management Plan. 9:30-3:30 PM. Montgomery County Extension Office, Derwood, MD. \$20. Register online or call Dwight Dotterer (410) 841-5959.
- 26 Sept.** Women in Ag Webinar: Farm Recordkeeping. 12 PM. Free. Register [online](#).
- 5 Oct.** Pesticide Applicator Training. **Baltimore County** Extension Office, Cockeysville, MD. Call (410) 887-8090.
- 9 Oct.** New Pesticide Applicator Training. 9-11 AM. **Harford County Extension Office**, Street, MD. \$7. Call (410) 638-3255.
- 16 Oct.** Private Applicator Recertification Training. 1-3 PM. **Harford County** Extension Office, Street, MD. Free. Call (410) 638-3255.

September 2018