

Ag Notes

Harford County Newsletter

UNIVERSITY OF
MARYLAND
EXTENSION

September 2020

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!

It's hard to believe that fall is nearly on our doorstep, which is an excellent time of year to control perennial weeds in our fields. Over the past couple of weeks, I have gotten several inquiries about johnsongrass control, which is thriving this summer due to the extreme heat. Briefly, I wanted to mention that now is a good time to make herbicide applications to weaken the johnsongrass root system and rhizomes, which will help limit its spread next year. Full-rate label applications of glyphosate work well. Also, for pastures, repeated mowing throughout the summer and fall of johnsongrass will deplete the rhizomes of their carbohydrate reserves, and over time, will kill the plant. Removing the tops that bear the seed will also help reduce the spread of the plant via seed, which is also important in row-crop production to avoid spreading johnsongrass seed via the combine at harvest. If you have specific questions regarding johnsongrass management, call the Extension office.

Also, many have called me asking what will happen with private applicator certification testing and recertification training for pesticide applicators and nutrient management. Over the past couple of weeks we have met with the Maryland Department of Agriculture (MDA) to discuss these topics.

In summary, MDA is not going to extend certifications. So if your pesticide license or nutrient management voucher expires this year, you will need to obtain the necessary credits to renew your license. Keep in mind that these certifications are on a three-year cycle, so if you attended a class and obtained continuing education credits (CEUs) within the three year span, you have the



The Extension office remains closed to the public and visitations are by appointment only. Faculty and staff can be reached via e-mail or phone.

necessary credits to renew your certification. As a reminder, private pesticide applicators and nutrient management voucher certifications require 4 CEUs every three years; which is equivalent to 2 hours of training. If you need credits, University of Maryland will be offering several opportunities in which you may obtain credits.

Currently, University of Maryland protocols prohibit us from holding indoor, in-person meetings. Therefore, a bulk of our recertification meetings will be virtual via live webinars or recorded webinars. We are also working on a way for a mail-in paper renewal where you could read relevant materials to obtain credits. These classes will be scheduled in late fall/winter, so be on the lookout for dates and more information in our upcoming newsletters.

For individuals that need to take the private applicator exam to become a certified pesticide applicator, MDA will be proctoring exams in Annapolis and across the state. I am working with MDA to set up some testing dates here in Harford County. More information regarding dates and procedures will follow in upcoming issues.

As a reminder, the renewal process for private applicator pesticide certification is online via www.egov.maryland.gov/MDA/Pesticides. For instructions on how to use the system, refer to our step-by-step guide (contact Andy for a copy) or YouTube [video tutorial](#).

Until next time,
-Andy



Amanda Grev, Pasture & Forage Specialist
University of Maryland Extension

[Last month](#) we discussed strategies for assessing pasture stands and some initial considerations when beginning to think about pasture renovations. Now that August has arrived, if you have decided to proceed with some form of pasture renovation this fall it will soon be time for planting. Regardless of the extent of your renovation, there are several steps you should follow to make sure the seeding process goes smoothly. Below is an overview of the key steps necessary for optimum forage establishment.

Step 1: Correct Soil Fertility

Poor soil fertility is one of the most common causes of poor stand establishment and also poor stand persistence over time. Acidic conditions (low soil pH) will reduce nutrient availability and impair root growth and development, and essential nutrients like phosphorus are critical for proper seedling development. Because of these effects on plant nutrient availability and utilization, ensuring adequate soil pH and fertility is essential for optimum stand establishment and to obtain persistent, high-yielding stands long term. Soil fertility testing should be done prior to renovation so that lime and fertilizer can be applied according to soil test recommendations.

Step 2: Control Weeds

Weeds compete with desirable forages for light, nutrients, moisture, and space and can shade out or outcompete new seedlings. For best results, ensure weeds are controlled prior to seeding. Remember that while herbicides can be a useful tool for weed management, they are not the only option for weed control. An integrated approach that combines various cultural, mechanical, and chemical control practices will be the most successful.

Step 3: Select Adapted Species

Not all forages will perform equally on different sites, so be sure to select forages that are well suited for your soil and site characteristics. This includes variables such as soil type, drainage, moisture holding capacity, pH, fertility, and topography. For example,

species such as orchardgrass or alfalfa require a higher level of fertility and will not thrive in systems with low soil pH or poor soil fertility. Be sure to select forage species that will match your intended use (hay vs. pasture, perennial vs. annual, time of year, management system) and livestock requirements based on species, age, and life stage.

Step 4: Inoculate Legume Seeds

If you plan to incorporate a legume as part of your forage mix, be sure the seed is properly inoculated with nitrogen-fixing bacteria. Some legume seeds come pre-inoculated, which saves time and helps to ensure inoculation. If not, be sure to select the appropriate inoculant strain depending on the legume species and inoculate the seed with fresh inoculant prior to seeding using an effective adhesive material to hold the inoculant on the seed. Inoculants are living organisms and will only work if the bacteria are alive when applied, so be sure to use proper storage and handling and check expiration dates.

Step 5: Graze and/or Clip Close

Grazing or clipping a pasture close to ground level prior to seeding will help eliminate residue and assist in suppressing competition from existing vegetation, giving new seedlings an opportunity to grow. If using livestock to accomplish this via grazing, be mindful of the potential effects this may have on animal performance, including the consumption of lower quality forage and/or the potential for increased parasite loads as animals graze below the usual minimum height recommendation.

Step 6: Prepare a Proper Seedbed

This step will vary slightly depending on the use of tilled vs. no-till seedings. If using tillage, be sure the seedbed is soft yet firm following tillage. An underworked seedbed will have too much surface residue and will be too rough for good seed placement, while an overworked seedbed will be too fluffy and fine and will dry out quickly. A good rule of thumb is that your boot tracks should be around ¼ inch deep. For no-till seedings, it is especially important to suppress the



3 existing stand and reduce residue prior to planting. In addition to close grazing and/or clipping, the existing stand can be suppressed using a nonselective herbicide.

Step 7: Seed at the Proper Depth

Seeding too deep is one of the most common causes behind establishment failures. Be sure the seed drill is calibrated appropriately so that seed is placed at the proper depth. Take into account your soil type, texture, and moisture conditions; in general, seed should be placed slightly shallower in a heavier soil with a higher moisture content and slightly deeper in a lighter soil with lower moisture content. For most cool-season forages, the ideal seeding depth is $\frac{1}{4}$ to $\frac{1}{2}$ inch, but seed characteristics vary so be sure to determine the optimum depth and adjust accordingly prior to planting. The key is to provide good seed to soil contact without placing the seed too deep.

Step 8: Seed at the Proper Time

Cool-season forages can be seeded in either the spring or late summer. Advantages of late summer seedings generally include reduced weed competition and cooler weather conditions during establishment. The ideal time will vary depending on your location and weather conditions but in general, the optimum time for late summer seeding in Maryland occurs from mid-August through mid-September.

Step 9: Seed at the Proper Rate

Similar to seed depth, calibration is essential to achieve a proper seeding rate. Seeding rates will vary based on forage species selection, be sure to follow recommendations when making seeding rate decisions. Pasture seeding rates are typically higher than hay seeding rates to provide a denser sod for grazing. Seeding rates can be adjusted slightly based on conditions at the time of seeding. If conditions are optimum, seed at the lower end of the recommended range. If conditions are poor, seed at the higher end of the recommended range.

Step 10: Manage New Seedlings During Establishment

New seedlings are especially sensitive during their establishment year. To maximize success, delay grazing on newly seeded areas until sufficient root systems have been developed to prevent livestock from uprooting newly established plants when grazed. Avoid grazing new stands during extremely wet periods, be very careful not to overgraze, and continue to scout for weeds or other potential issues that can impair establishment.

Forage Performance of Cereal Cover Crops

*Nicole Fiorellino, Extension Agronomist
University of Maryland, College Park*

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 (21) representing four species (rye, triticale, wheat, barley) were evaluated at Central Maryland Research and Education Center – Clarksville Facility.

The report contains several tables that do not fit in this newsletter, so for a copy, please [click here](#) or request a hard copy from our Extension office.



2020 Cash Rental Rates Released

Paul Goeringer, Agriculture Legal Specialist
University of Maryland Extension

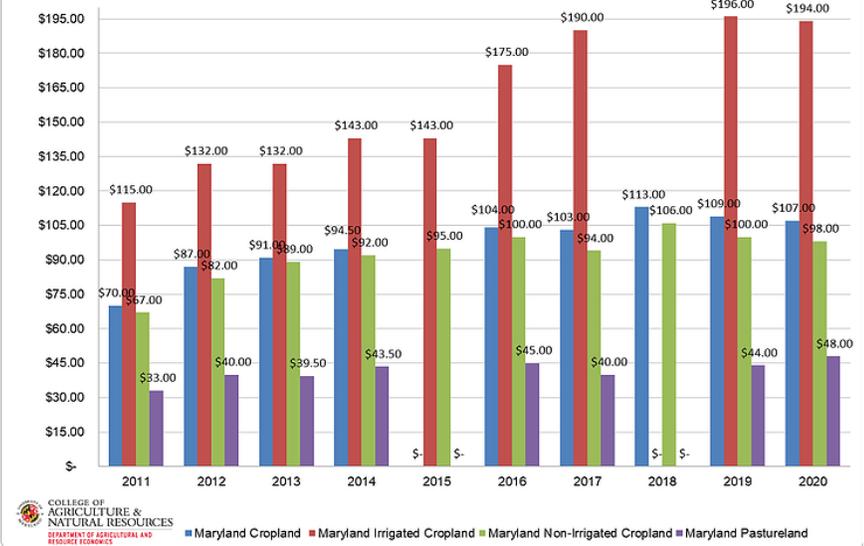
Reposted from the [Agriculture Risk Management Blog](#), abridged

USDA's National Agricultural Statistic Service (NASS) updated data on cash rent paid by farmers in 2020. NASS collects this data from 240,000 farms across the United States annually through the Cash Rent Survey - data used by other agencies throughout USDA. The survey results give us an idea of what other tenants in the area may be paying per acre for farmland.

One important note: many of you often ask me just what constitutes a reasonable cash rent price. I honestly have no idea what a fair cash rent price is for you, or the other party, based on a certain piece of farmland. The averages will give you a good starting point, but you should always carefully consider determining a good price. Resources exist at www.aglease101.org to help you calculate cash rent, crop-share rent, or flex-cash rent. Utilizing these resources first can help you determine rent prices that will work for you.

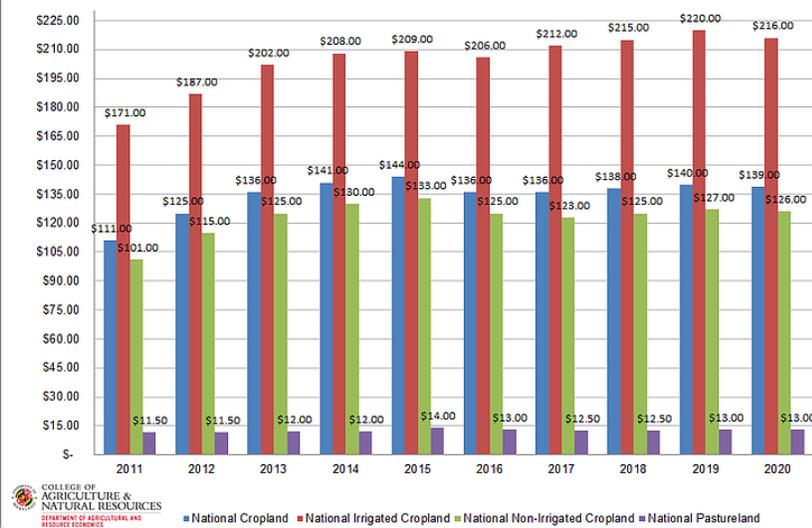
Nationally, cash rent averages in 2020 were down (table 1). Non-irrigated cropland cash rent went down from \$127/acre in 2019 to \$126/acre in 2020, or a 0.71 percent decrease. Pasture rent stayed steady at \$13/acre in 2020 from 2019 (table 1).

Table 3: Maryland Average Cash Rents per Acre for 2011-2020, Source USDA-NASS



How did we do in Maryland, and how did Delaware do compared with national averages? The answer depends on where you lease farmland. Delaware saw cropland cash rents decrease by 5.88 percent (table not shown). Cropland cash rents in Delaware declined by \$7/acre in 2020, going from \$119 in 2019 to \$112 in 2020. The average irrigated cropland in Delaware decreased by 6.21 percent in 2020, from \$161/acre average in 2019 to \$151/acre average in 2020. Delaware also reported an average pasture rental rate of \$55/acre in 2020.

Table 1: U.S. Average Cash Rents per Acre for 2011-2020, Source USDA-NASS



Maryland saw a 2-percent decrease in average non-irrigated cropland cash rent, or down \$100/acre in 2019 to \$98/acre in 2020 (table 3). Average irrigated cropland decreased by 1.02 percent in 2020, down from \$196/acre average in 2019 to \$194/acre average in 2020 (table 3). Average pastureland cash rents were up 9.09 percent in Maryland in 2020, going from \$44/acre in 2019 to \$48/acre in 2020 (table 3).

NASS will release county cash rental rates later in August for 2020. For last year's average cash rents, see (<https://extension.umd.edu/grainmarketing/lease-agreements>). For more information on farmland leasing, see the "Lease Agreements" section of UME's [Grain Marketing website](#).

CFAP Deadline Extended; New Crops Added

USDA [press release](#), abridged

Application Deadline Extended to Sept. 11, and Producers Who Have Approved Applications to Receive Final Payments

U.S. Secretary of Agriculture Sonny Perdue announced today that additional commodities are covered by the Coronavirus Food Assistance Program (CFAP) in response to public comments and data. Additionally, the U.S. Department of Agriculture (USDA) is extending the deadline to apply for the program to **September 11th**, and producers with approved applications will receive their final payment. After reviewing over 1,700 responses, even more farmers and ranchers will have the opportunity for assistance to help keep operations afloat during these tough times.

Background:

USDA collected comments and supporting data for consideration of additional commodities through June 22, 2020. The following additional commodities are now eligible for CFAP:

Specialty Crops - aloe leaves, bananas, batatas, bok choy, carambola (star fruit), cherimoya, chervil (french parsley), citron, curry leaves, daikon, dates, dill, donqua (winter melon), dragon fruit (red pitaya), endive, escarole, filberts, frisee, horseradish, kohlrabi, kumquats, leeks, mamey sapote, maple sap (for maple syrup), mesculin mix, microgreens, nectarines, parsley, persimmons, plantains, pomegranates, pummelos, pumpkins, rutabagas, shallots, tangelos, turnips/celeriac, turmeric, upland/winter cress, water cress, yautia/malanga, and yuca/cassava.

Non-Specialty Crops and Livestock - liquid eggs, frozen eggs and all sheep. Only lambs and yearlings (sheep less than two years old) were previously eligible.

Aquaculture - catfish, crawfish, largemouth bass and carp sold live as foodfish, hybrid striped bass, red drum, salmon, sturgeon, tilapia, trout, ornamental/tropical fish, and recreational sportfish.

Nursery Crops and Flowers - nursery crops and cut flowers.

Other changes to CFAP include:

Seven commodities – onions (green), pistachios, peppermint, spearmint, walnuts and watermelons – are now eligible for Coronavirus Aid, Relief, and Economic Stability (CARES) Act funding for sales losses. Originally, these commodities were only eligible for payments on marketing adjustments.

Correcting payment rates for onions (green), pistachios, peppermint, spearmint, walnuts, and watermelons.

Additional details can be found in the Federal Register in the [Notice of Funding Availability](#) and [Final Rule Correction](#) and at www.farmers.gov/cfap.

Producers Who Have Applied:

To ensure availability of funding, producers with approved applications initially received 80 percent of their payments. The Farm Service Agency (FSA) will automatically issue the remaining 20 percent of the calculated payment to eligible producers. Going forward, producers who apply for CFAP will receive 100 percent of their total payment, not to exceed the payment limit, when their applications are approved.

Applying for CFAP:

Producers, especially those who have not worked with FSA previously, are recommended to call 877-508-8364 to begin the application process. An FSA staff member can help producers start their application during the phone call.

On farmers.gov/cfap, producers can:

- Download the AD-3114 application form and manually complete the form to submit to their local USDA Service Center by mail, electronically or by hand delivery to their local office or office drop box.
- Complete the application form using the CFAP Application Generator and Payment Calculator. This Excel workbook allows customers to input information specific to their operation to determine estimated payments and populate the application form, which can be printed, then signed and submitted to their local USDA Service Center.
- If producers have login credentials known as eAuthentication, they can use the online CFAP Application Portal to certify eligible commodities online, digitally sign applications and submit directly to the local USDA Service Center.

All other eligibility forms, such as those related to adjusted gross income and payment information, can be downloaded from farmers.gov/cfap. For existing FSA customers, these documents are likely already on file.

Jerry Brust, Vegetable IPM Extension Specialist
University of Maryland Extension

Last week several fields were found with one or more of the big three for mid-summer pests in tomato. These disease and insect pests do well in hot weather, although two spotted spider mites (*Tetranychus urticae*) and thrips (*Frankliniella* spp.) do best in hot dry weather and bacterial spot (*Xanthomonas* spp.) likes it wetter. Bacterial spot in tomatoes and peppers is a tough one to manage and it seems to be more difficult to do so in the last several years. One of the possible reasons is that copper is not working as well as it once did because of the development of resistance. Combining copper with mancozeb has helped, but in hot rainy weather it is still difficult to slow its spread. It has been my observation over the years that the copper-fungicide combination seems to protect the fruit fairly well (but not always) from becoming infected with bacterial spot or speck. So even if the foliage is infected by the bacteria much of the fruit is usually OK, although the bacteria will infect the pedicel and flower, which can cause flower abortion.

The big problem is the infected foliage eventually dies and the plant has exposed fruit (fig. 1) that at first is not a problem but as the season moves on the exposed fruit becomes sunburned and unmarketable (fig. 1).

Actigard is a plant activator and when used preventively with copper-fungicide treatments has done a very good job of reducing bacterial spot and speck problems in tomato fields. With thrips, the difficulty is getting the chemical controls to the pest on the underside of a leaf on plants with heavy foliage. Thrips feeding damage appears as small white dots or stipples scattered on a leaf often with tiny black specks around these feeding scars which is thrips feces (fig. 2).



Figure 1. In mid-August plants defoliated because of bacterial spot allow fruit to become sunburned.



Figure 2. Thrips feeding damage and black specks-thrips feces.

Radiant insecticide would be good to try first if it has not been used much before in the field, if it has a different chemistry such as Torac or Harvanta should offer better control (each has a 1-day PHI and a 4-12 hr REI). Growers also report success with controlling thrips using combination products that use a pyrethroid and a neonicotinoid such as Endigo, Brigadier or Leverage, etc. However, growers need to be sure to use high gallonages (50-90 gal/a) and pressures (150-200 psi) and if possible hollow cone nozzles to get the insecticide into the tomato's dense canopy and to the underside of leaves.

Two spotted spider mites do damage that looks similar to thrips, but they do not produce black flecks where they have scarred the leaf tissue (fig. 3). Mites become very difficult to control if you see webbing on the underside or top of an infested leaf. This is because the webbing reduces the mites exposure to any miticides. There are several miticides that work well, provided the material gets to the mites, such as Agri-Mek, Portal, Oberon or Acramite.



Figure 3. Two spotted spider mite feeding damage to tomato foliage.

On-Farm Solar Training

*Drew Schiavone, Energy Specialist
University of Maryland Extension*

Are you interested in installing solar photovoltaics (PV) on your farm? If so, you'll want to join this free webinar series, designed to help farmers, landowners, and ag service providers across the state address the opportunities and challenges associated with on-farm solar PV.

Many farms in Maryland are considering solar PV due to high energy costs, the decreasing cost of solar technology and various environmental benefits. For these reasons and more, farmers and landowners across the state are considering small-scale installations to support their operations and/or leasing their land for large-scale solar installations.

This series explores the basic principles of solar PV technology and the application of appropriate on-farm technology. The information and resources provided in this webinar series will help you to sustainably

implement solar PV on your farm.

Live training sessions will run weekly on Wednesdays from 1:00pm-2:00pm from September 30 through December 2. No session will be held on Thanksgiving week (November 25). Participants are encouraged to join the live presentations as they occur, however, all presentations will be recorded for later viewing. Presentations will be conducted on Zoom with other educational materials made available through this webpage. Each module will be presented live by University and Extension experts. **All training sessions are free.**

REGISTRATION: go.umd.edu/agsolarenergy

For more information about the program, contact Drew Schiavone dschiavo@umd.edu, (301) 432-2767 ext. 342

SCD Supervisor To Be Appointed

Nominations for an appointment to the Harford Soil Conservation District (SCD) Board of Supervisors are being accepted by the Maryland State Soil Conservation Committee.

The appointment will be for a term to expire **October 17, 2025** and will fill the expired term of **Frank Richardson**. Nominations should be sent to: State Soil Conservation Committee, Department of Agriculture, 50 Harry S. Truman Parkway, Room 306, Annapolis, MD 21401.

Any interested individual or organization may submit a recommendation. Nomination forms are available at the office of Andrew Kness, Extension Educator, 3525 Conowingo Road, Suite 600, Street, MD 21154 (by appointment only; call 410-638-3255). Forms may also

be picked up at the Harford Soil Conservation District Office (address same as above, suite 500; call 410-638-4828 to schedule an appointment). Nominations should be received by the State Soil Conservation Committee by **October 5, 2020**. The form is also available online at www.mda.maryland.gov (click on Conservation then Committees).

A supervisor must be a resident of the district. District boundaries are the same as county boundaries. Anyone recommended should be able to attend monthly meetings of the Board of Supervisors and have a knowledge of and a sincere interest in proper land use and the conservation of soil, water and related resources.

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

- 02 Sept.** Hay and Pasture Webinar. 3 PM. Free. Register [online](#).
- 09 Sept.** [Women In Ag Webinar: Thoughts on Animal Welfare](#). 12 noon. Free. Register [online](#).
- 23 Sept.** [Women In Ag Webinar: Ag Labor and Mistakes to Avoid](#). 12 noon. Free. Register [online](#).
- 30 Sept.—02 Dec.** [Ag Solar Energy Webinar Series](#). 1-2 PM, weekly. Free. Register [online](#).
- 05-09 Oct.** [Webinar Series: How to Write a Nutrient Management Plan](#). Daily, 1-3 PM. Free. Register [online](#).

Check out these additional online resources from

 Maryland Grain	 Ag Law Initiative
 Agronomy News Blog	 Women in Ag
 Nutrient Management	 Plant Diagnostic Lab
 Extension Website	

Private applicator training classes for renewal and testing dates for new certifications will be announced later and scheduled for late fall/winter.

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