



FARM NOTES

Fall 2015

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BUSINESSES CAN NOW RENEW PESTICIDE LICENSES, PERMITS & CERTIFICATES ONLINE

Businesses, public agencies and commercial applicators can now renew their pesticide licenses, permits or certificates online from any mobile or desktop device, 24 hours a day, through the Maryland Department of Agriculture (MDA) website. This online service also allows those renewing licenses to print their renewal certificates directly from a computer.

“We’ve put a lot of work into creating a system that makes pesticide renewal simpler,” said MDA Pesticide Regulation Program Manager Dennis Howard. “We hope that our customers will find the tools offered effective and convenient.” Businesses renewing licenses can submit an online renewal application by entering the license number, type of business, and a code sent to them from MDA.

Along with renewals, consumers can search an online database for certified businesses, applicators and dealers of pesticides. Searches offered online also include information about pesticide renewal and recertification courses.

Renewals and database searches can be done here: <https://www.egov.maryland.gov/mda/pesticides>

Pesticide businesses and individual pesticide applicators are required by law to be trained and certified in proper handling, storage and use of pesticides to prevent accidents and promote safe usage. For more information about pesticide regulation and licensing visit http://mda.maryland.gov/plants-ests/pages/pesticide_regulation.aspx

The University of Maryland Extension programs are open to any person and will not discriminate against anyone because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry, national origin, marital status, genetic information, political affiliation, and gender identity or expression.

BECOME A MARYLAND CERTIFIED PRIVATE PESTICIDE APPLICATOR

If you have allowed your Private Pesticide Applicator Certification to expire or are a new applicant, then you are invited to attend the Private Pesticide Applicator Certification Training and Examination. It's a three step process:

Step 1: Register for the training by calling 410-386-2760 at least one week before the training date. Stop by the Carroll County Extension Office (or any University of Maryland Extension office) to pick up a copy of the **Maryland Pesticide Applicator Core Manual, cost \$7.00**. Read the manual and go over the review questions at the end of each chapter and practice exam. The dates for this year's training and test will be:

Step 2: Private Applicator Certification Training will be conducted at the Carroll County Extension Office from **6-8 pm on November 5, 2015**.

Step 3: Private Pesticide Applicator Exam will be given at the Carroll County Extension Office from **6-8 pm on November 12, 2015**.

PESTICIDE APPLICATOR RECERTIFICATION

If your Maryland Pesticide License will expire on December 31, 2015 it is time to attend recertification training. To facilitate RECERTIFICATION your Carroll County Extension Office will have two separate RECERTIFICATION opportunities for you to attend. They will be **December 2, 2015 at the Finch Services Sprayer Clinic, 10-2 pm**. and **February 25, 2016, 6-8 pm**. Preregistration one week in advance is required. Please call (410-386-2760) in early to reserve your space as seating is limited and goes quickly. **Be sure to bring your Pesticide License Number with you.**

Here are more opportunities for Pesticide Recertification being offered at other locations and these are good for Nutrient Management Voucher Training also:

- **December 15, 2015, 9 am.-3:30 pm.- Northern Maryland Field Crops Day** at Friendly Farms, 17434 Foreston Road, Upperco, MD. Call the Baltimore County Extension Office for more information at 410-887-8090.
- **January 29, 2016, 8 am.-3:30 pm.- Central Maryland Vegetable Growers Meeting** at Friendly Farms, 17434 Foreston Road, Upperco, MD. Call the Baltimore County Extension Office for more information at 410-887-8090.
- **February 3, 2016, 10 am.-2:00 pm.- CC Mid-Winter Farm Meeting** at Burns Hall, 706 Agriculture Center, Westminster MD, Must call to register at 410-386-2760.

NUTRIENT MANAGEMENT VOUCHER TRAINING

Every three years you need to update/renew your MDA nutrient management voucher. Sessions have been scheduled this fall to provide you the opportunity to meet MDA's every three year requirement. Trainings are scheduled for **November 24, 2015, January 7, 2016, and March 1, 2016 from 6-8 pm** at the Carroll County Extension office. Please call (410-386-2760) at least one week in advance to reserve your seat. If you have any questions please call the Extension Office at 410-386-2760. If you do not have a nutrient management voucher and need one, this training will also meet that need.



Carroll County Mid-Winter Meeting
February 5, 2016
Carroll County Ag Center, Westminster, MD

- 9:30-10:00 Registration, Coffee and Doughnuts
- 10:00-10:30 **Grain Bin Management for Quality Grain Storage** by Dr. Bob Kratochvil, PSLA
- 10:30-11:00 **Palmer Amaranth and Herbicide Resistance Issues** by Dr. Burkhard Schulz, PSLA
- 11:00-11:30 **Rainy Harvest Weather and Wheat Quality** by Dr. Bob Kratochvil, PSLA
- 11:30-12:00 **Soybean and Small Grain Variety Trials** by Dr. Jason Wight, PSLA
- 12:00-12:30 Lunch
- 12:30-1:00 **Soybean Maturity and Planting Dates** by Jim Lewis, Caroline County Extension Agent
- 1:00-1:30 **Nutrient Management Update** by Bryan Harris, MDA
- 1:30-2:00 **Pesticide Update** by Ashley Jones, MDA
- 2:00-2:30 **Insect Tolerance to B.t. and Other Insecticides and Review of Slug Control Products in No-till Corn** by Dr. Kelly Hamby, ENTM
- 2:30 Wrap up and Sign Recertification Sheets

The University of Maryland, College of Agriculture and Natural Resources programs are open to all and will not discriminate against anyone because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry, or national origin, marital status, genetic information, or political affiliation, or gender identity and expression.

2015-2016 AGRIBUSINESS SCHEDULE

8 - 9 a.m. on the first Thursday of each month September through June at Baugher's Restaurant, 289 W. Main St., Westminster.

Come enjoy the speakers and fellowship. All are welcome. No dues or membership required.

Breakfast cost is \$9.30 per person.

Nov. 5, 2015: The Modern Mill: Seed and Fertilizer Sales and Service for Today's Farmer – Henry Holloway, President and Owner, The Mill

Dec. 3, 2015: To be announced

Jan. 7, 2016: Curating the Collection: An Update – Stefanie Strosnider, Curator, Carroll County Farm Museum

Feb. 4, 2016: Out of My Hands: GPS Controlled Farm Equipment and Drone Applications for Agriculture

-- Ken Diller, Precision Ag Manager, Hooper, Inc.

March 3, 2016: Everything Eggs: Production, Marketing and the Avian Flu -- Evan Fogarty, Plant Manager, Sauder's Eggs, Hampstead, MD

April 7, 2016: Agriculture Initiatives at the University – Dr. Craig Beyrouthy, Dean of the College of Agriculture and Natural Resources, University of Maryland

May 5, 2016: This Year's Legislative Wrap-Up – State Senator Justin D. Ready

June 2, 2016: Dairy and Your Diet -- Ann Dicke, Faculty Extension Assistant for 4-H Youth Development, University of Maryland Extension – Carroll County

CHOOSING THE RIGHT MARKET CHANNEL

Diversified farming means we have to be experts in the production requirements for each of the products we produce. On top of that, we need to be able to have a market for each product. How we plan to sell our products is just as important as deciding how we will grow them.

“Simple” you say, “I’ll sell them at the farmers market or through my CSA”. Not so long ago, that option was a no-brainer, but today, many CSA’s struggle to fill shareholder slots and vendor spaces may be limited at the farmers markets. Fortunately, there are many more channels for reaching your potential customer these days. But, we need a way to evaluate those channels so we can assess which ones might be best for our business and our quality of life.



Marketing what we grow can take up to thirty percent of our time, which is time away from farming. We need to ask ourselves:

- “What markets will give me the greatest return on my time and amount of product sold?”
- “Am I the right person to be marketing my product?”
- “If I’m not the right person, who is”?

If you decide that you are the right (or only) person to do the marketing, then you need a way to figure out how you can have a diverse marketing plan and still have time to grow your products.

The goal should be to have a marketing plan that is just as diverse as the farm products you are offering.

Let's think about what channels you want to use to sell your products. Some market channels we pick because they appeal to us and others because they are a necessity. They aren't our favorite market outlets, but we feel we have to do them. An example might be farmers markets. Some folks love being at the market and others do not. But, if your goal is to build up your CSA or pick your own operation, then selling at a farmers market could be a short term marketing solution to get your farm's name out into the community. It is inexpensive advertising while selling your products as well.

Let's take a look at an exercise borrowed from the "Guide to Marketing Channel Selection" written by Matthew LeRoux, Agricultural Marketing Specialist, Cornell Cooperative Extension of Tompkins County NY. This exercise can help you make some decisions about your marketing channels. On the left hand side of the chart we have the marketing channels our example farm is planning to use. We want to rank the channels against each other. "1" is the best criteria and "5" being the least favorable. Channels you feel are equal for a certain criteria are given the same number and the next number is skipped. After you rank the market channels, you can total up the scores, and give each channel a final ranking. The channel with a final ranking of "1" is the most favorable.

Marketing Channel	Volume	Price	Risk	Labor Required	Assoc. costs	Total Score	Final Rank
On-farm Stand	4	1	1	3	3	12	2
Farmers Market	3	2	4	4	1	14	4
Restaurants	2	3	2	2	1	10	1
Wholesale Distribution	1	4	3	1	4	13	3

For our example farm, it looks like restaurants would be the preferable marketing channel. Over time, these rankings can change. For instance, if the volume of product sold increases for their on-farm sales then that channel may replace restaurants as the top ranking channel. We can also see that Wholesale Distribution ranks higher than Farmers Markets largely because of the labor associated with farmers markets, which can also change over time.

Finally, consider how each of the market channels will affect you personally. What is the perceived level of stress involved with supplying those market channels? What will it do to your (and your family's) quality of life? If need be, add that as a column to this exercise. It is just as important as the rest for a profitable and happy farming life.

Source: Brian Moyer, Penn State, bjm3@psu.edu, 610-391-9840

PREVENTING COMBINE FIRES

As many of you may know we have had several field fires in the past two weeks. I have attached a fact sheet on "Preventing Combine Fires"

Here are the highlights:

- ✓ Keep Your Equipment Clean
- ✓ Pay Special Attention to Routine Maintenance
- ✓ Special Precautions for Refueling
- ✓ Take a piece of equipment (disk, V blade) that would contain the fire in the field
- ✓ Have a Fire Extinguisher in all farm equipment.
- ✓ Call 911 first then attempt to extinguish.



FALL CONTROL OF PERENNIAL WEEDS

Fall is often the best time and the most convenient time to treat most perennial weeds because it is the time that plants are best able to move the herbicide to the roots where it will do the most good. When considering fall weed control the emphasis should be on what the patch of weeds will look like next spring or summer not the amount of dead stems this fall. Also, it is important to consider that a fall application will not eradicate a stand of perennial weeds; the fall application will reduce the stand size or the stand vigor. Fall application of glyphosate is the most flexible treatment for most perennial weeds such as bermudagrass, Canada thistle, common milkweed, common pokeweed, dock, hemp dogbane, horsenettle and johnsongrass. Rates of 1 to 1.25 lb. acid per acre are consistently the most economical (or about 1.5X the normal use rate for annual weeds). Dicamba (Banvel) at 2 to 4 pints is also labeled for artichoke, bindweeds, dock, hemp dogbane, horsenettle, milkweeds, pokeweed or Canada thistle. Planting small grains must be delayed after dicamba application 20 days per pint of dicamba applied. Fall herbicide applications should be made to actively growing plants. It is best to allow plants to recover after harvest and to spray prior to mowing the corn stalks. Allow 10 to 14 days after treatment before disturbing the treated plants. If fall applications are de-layed, remember weed species differ in their sensitivity to frost; some are easily killed by frost (i.e. horsenettle) others can withstand relatively heavy frosts. Check the weeds prior to application to be sure they are actively growing.

Source: Mark VanGessel, DE Extension Weed Specialist mjv@udel.edu

MID-ATLANTIC CROP MANAGEMENT SCHOOL

November 17 to 19, 2015, Ocean City, MD.

Register for MACMS online at: <https://www.SignUp4.net/public/ap.aspx?EID=20154802E>. If you prefer a pdf version of the MACMS brochure, please mail Richard Taylor at rtaylor@udel.edu. The program for the 2015 has now been set and the online registration website went active as of 5:00 pm on Friday, September 18, 2015. Everyone is welcome to attend. Local and regional farmers, independent consultants, certified crop advisers,

nutrient management consultants, and agency and university professionals join together to learn the latest on a wide range of topics from local, regional, and even national speakers. Sessions on pest management, crop management, soil and water management, fertility management and some interactive sessions will be offered. Certified Crop Adviser (CCA), Nutrient Management, and Pesticide credits are available. Continuing education credits are available from a number of states in the region including Delaware, Maryland, West Virginia, Virginia, New Jersey, and Pennsylvania. There are 43 different talks to choose from over the 2.5 day school. Some of the topics that will be covered are:

- Effects of Stress on Corn Early in the Season
- High Yield Soybeans: Is There a Recipe? Roundtable Discussion
- Row Crop Planters – Wider, Faster, or Both
- Lime Rate and Its Relationship to Fertility and Soil Type
- Nitrogen Release from Non-chemical Fertilizers
- The Intersection of Cover Crops and Weed Control
- Future Technologies for Herbicide Resistance Weed Management
- Understanding and Identifying Stalk Rots in Corn

WHEAT STAND EVALUATION



Make time now to evaluate your wheat stands and put the information into play for next year. Producers still planting wheat this fall can garner some insight here too. Soon the first of the 2016 wheat crop will be emerging. With dry conditions for planting and this week's rain, emergence should be fairly good. But wheat emergence is something we should get some feedback on.

Ideally in our typical seeding situations we are shooting for about 1.3 million plants per acre and this requires about 19-20 plants per foot of row in 7.5 inch rows. With a seeding rate of around 1.5 million seeds and good emergence, we should get plant stands in this range. With some fall tillering generating an average of 2 to 2.5 tillers per plant, we should be able to end up with a wheat stand with 40-50 heads/foot of row, which often results in a crop with high yield potential. In early seeded wheat, there is some potential for more tillering, so sometimes we can achieve good yields with lower plant populations and seeding rates.

But the bigger issue is when planting into high residue conditions following high yielding soybeans or especially corn. In these situations, we may not always achieve the desired stands in the 19-20 plants/foot of row. In some cases, even with normal mid-season planting dates, it may be good to consider a higher seeding rate in the 1.7 million/acre or 25 seeds per foot of row if stands are not reaching desired levels. So take some time after wheat emergence this fall under different conditions and make some estimates of emergence to use as feedback for seeding rate recommendations for the future. It's best to do this shortly after emergence before the wheat tillers.

Source: Greg Roth, Professor of Agronomy, Penn State

USDA EXTENDS DAIRY MARGIN PROTECTION PROGRAM DEADLINE

Agriculture Secretary Tom Vilsack announced that the deadline to enroll for the dairy Margin Protection Program for coverage in 2016 has been extended until Nov. 20, 2015. The voluntary program, established by the 2014 Farm Bill, provides financial assistance to participating farmers when the margin – the difference between the price of milk and feed costs – falls below the coverage level selected by the farmer.

“The fall harvest is a busy time of the year for agriculture, so this extension will ensure that dairy producers have more time to make their choices,” said Vilsack. “We encourage all operations to examine the protections offered by this program, because despite the very best forecasts, markets can change.”

Vilsack encouraged producers to use the U.S. Department of Agriculture’s Farm Agency Service (FSA) online Web resource at www.fsa.usda.gov/mpptool to calculate the best levels of coverage for their dairy operation. The secure website can be accessed via computer, smartphone or tablet.

He also reminds producers that were enrolled in 2015 that they need to make a coverage election for 2016 and pay the \$100 administration fee. Although any unpaid premium balances for 2015 must be paid in full by the enrollment deadline to remain eligible for higher coverage levels in 2016, premiums for 2016 are not due until Sept. 1, 2016. Also, producers can work with milk marketing companies to remit premiums on their behalf.

To enroll in the Margin Protection Program for Dairy, contact your local FSA county office. To find your local FSA county office, visit <http://offices.usda.gov>.

Payments under the program may be reduced by a certain percentage due to a sequester order required by Congress and issued pursuant to the Balanced Budget and Emergency Deficit Control Act of 1985. Should a payment reduction be necessary, FSA will reduce the payment by the required amount.

The Margin Protection Program for Dairy was made possible through the 2014 Farm Bill, which builds on historic economic gains in rural America over the past six years, while achieving meaningful reform and billions of dollars in savings for the taxpayer. Since enactment, USDA has made significant progress to implement each provision of this critical legislation, including providing disaster relief to farmers and ranchers; strengthening risk management tools; expanding access to rural credit; funding critical research; establishing innovative public-private conservation partnerships; developing new markets for rural-made products; and investing in infrastructure, housing and community facilities to help improve quality of life in rural America. For more information, visit www.usda.gov/farmland

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POTASH ORIGIN AND SOURCES

Potassium (K) in agriculture is often loosely referred to as potash. The term potash comes from an early production technique where K was leached from wood ashes and concentrated by evaporating the leachate in large iron pots. This method depended on tree roots to mine K from soils, which was then recovered after wood was harvested and burned. The K collected was in the form of potassium carbonate, which was used as fertilizer and in the manufacture of various products including glass and soap. Interestingly, the first patent granted in the USA (1790) was for potash production. Potash collection in this era was usually a secondary endeavor, with land clearing for farming being the primary goal of tree removal. Needless to say, this means of potash production was not sustainable.

Today K is produced in many parts of the world, with underground salt deposits—mostly a combination of K and sodium (Na) chloride—being the main source. These deposits were formed as ancient oceans evaporated, leaving behind concentrated salt layers that were subsequently buried by sediment. Many countries contain such deposits, with the largest being in western Canada. Extraction of K salts from these deposits is mostly accomplished by conventional shaft mining techniques; however, solution mining may be used in circumstances where shaft mining is prohibitive. Also, some naturally occurring surface-water brines (e.g., Great Salt Lake in Utah, Dead Sea bordering Jordan and Israel) contain sufficient K salts to make extraction feasible. With these surface brines solar evaporation is used to concentrate the salts before harvesting. All total, over 90% of modern global potash production goes into the manufacture of fertilizer.

Although there are many K fertilizer sources available, by far the most common is muriate of potash or potassium chloride (MOP; KCl). Other sources of K include potassium sulfate or sulfate of potash (SOP; K_2SO_4), potassium magnesium sulfate ($K_2SO_4 \cdot 2MgSO_4$), potassium nitrate (KNO_3), potassium thiosulfate (KTS; $K_2S_2O_3$), and less common sources such as potassium phosphate (KH_2PO_4), potassium carbonate (K_2CO_3), and potassium hydroxide (KOH). With the exception of the last two, all of these K sources contain other mineral nutrients essential for plant growth [chloride (Cl⁻), sulfur (S), magnesium (Mg), nitrogen (N), and phosphorus (P)].

Once the need for K fertilizer has been established, price and availability are usually the factors governing which source is the most desirable. Since KCl is the most abundant, it is almost always the most accessible and cheapest per unit of K. There are however circumstances where simple price and availability are overridden by other concerns. These circumstances may include:

Crop sensitivity to Cl⁻ – Some crops are less tolerant of Cl⁻ than others. Examples of sensitive crops are avocado, lettuce, peach, and tobacco. With the exception of certain soybean varieties, Cl⁻ sensitivity among common row crops and small grains is usually not an issue.

Salt index – The salt index of a fertilizer is simply a measure of salt injury potential, and is mainly a concern when fertilizer is applied to sensitive and/or high value crops. It may also be a concern in saline soils or where saline irrigation water is used. More detail on salt index is available in most basic agronomy texts.

The need for other nutrients – For example, if the need for Mg has been established then potassium magnesium sulfate may be the best choice.

Potash production has come a long way... from wood ash leaching during the early days, to modern large-scale mining operations that extract naturally occurring K bearing minerals.

Potassium fertilizer is more than ever critical to the production of sufficient and high quality crops to accommodate an expanding global population.

For more information on specific fertilizer materials see IPNI'S [Nutrient Source Specifics series at http://www.ipni.net/specifics-en](http://www.ipni.net/specifics-en)

Source: Dr. W.M. (Mike) Stewart, Director, IPNI North American Program, Ph: (210) 764-1588, [E-mail: mstewart@ipni.net](mailto:mstewart@ipni.net)

DATES TO REMEMBER

November 5 **Private Pesticide Applicator Test Training**-6 to 8 pm, Carroll County Extension Office, 700 Agriculture Center, Westminster MD, Must call to register at 410-386-2760.

- November 5 **Agribusiness Breakfast-The Modern Mill: Seed and Fertilizer Sales and Service for Today's Farmer**-Henry Holloway, President and Owner, The Mill, 8 to 9am, Baugher's Restaurant, Westminster MD, Must call 410-386-2760 or email mabbott@umd.edu to register.
- November 6 - 7 **12th Annual Small Farm Conference** sponsored by UMES. Register at: <http://www.eventbrite.com/e/12th-annual-small-farm-conference-tickets-18036971066/moo.umd.edu/shares/users/kent/vclrkstn/Documents/100th%20Anniversary%20CES>
- November 7 **MD Annual 4-H Horsemen's Party**-3 to 6:30 pm, Vista Room, MD State Fairgrounds, Timonium MD, Ticket can be purchased at <http://www.eventbrite.com/e/2015-maryland-4-h-horsemens-party-tickets-17498613825?aff=es2>
- November 12 **Private Pesticide Applicator Test**-6 to 8 pm, Carroll County Extension Office, 700 Agriculture Center, Westminster MD, Must call to register at 410-386-2760.
- November 17 – 19 **Mid-Atlantic Crop Management School**-9 to 5pm, Princess Royale Hotel in Ocean City. Register at <https://www.psla.umd.edu/extension/md-crops>
- November 24 **Nutrient Management Voucher Training**-6 to 8 pm, Carroll County Extension Office, 700 Agriculture Center, Westminster MD, Must call to register at 410-386-2760.
- December 2 **Private Pesticide Applicator Recertification/Finch Services Sprayer Clinic**-10 to 2pm, Burns Hall, 706 Agriculture Center, Westminster MD, Must call to register at 410-386-2760.
- December 3 **Agribusiness Breakfast**-To be announced-8 to 9am, Baugher's Restaurant, Westminster MD, Must call 410-386-2760 or email mabbott@umd.edu to register.
- December 15 **Northern MD Field Crop Day**-9 to 3:30 pm, Friendly Farms, 17434 Foreston Rd, Upperco, MD, Call the Baltimore County Extension Office for more information at 410-887-8090.
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- February 4 **Agribusiness Breakfast-Out of My Hands: GPS Controlled Farm Equipment and Drone Applications for Agriculture**-Ken Diller, Precision Ag Manager, Hooper, Inc., 8 to 9am, Baugher's Restaurant, Westminster MD, Must call 410-386-2760 or email mabbott@umd.edu to register.

- February 5 **Carroll County Mid-Winter Farm Meeting-** 10 to 2pm, Burns Hall, 706 Agriculture Center, Westminster MD, Must call to register at 410-386-2760.
- February 25 **Private Pesticide Applicator Recertification-**6 to 8 pm, Carroll County Extension Office, 700 Agriculture Center, Westminster MD, Must call to register at 410-386-2760.
- March 1 **Nutrient Management Voucher Training-**6 to 8 pm, Carroll County Extension Office, 700 Agriculture Center, Westminster MD, Must call to register at 410-386-2760.
- March 3 **Agribusiness Breakfast-Everything Eggs: Production, Marketing and the Avian Flu-**Evan Fogarty, Plant Manager, Sauder's Eggs, Hampstead, MD, 8 to 9am, Baugher's Restaurant, Westminster MD, Must call 410-386-2760 or email mabbott@umd.edu to register.
- April 7 **Agribusiness Breakfast-Agriculture Initiatives at the University-**Dr. Craig Beyrouthy, Dean of the College of Agriculture and Natural Resources, University of Maryland, 8 to 9am, Baugher's Restaurant, Westminster MD, Must call 410-386-2760 or email mabbott@umd.edu to register.
- May 5 **Agribusiness Breakfast-This Year's Legislative Wrap-Up-**State Senator Justin D. Ready, 8 to 9am, Baugher's Restaurant, Westminster MD, Must call 410-386-2760 or email mabbott@umd.edu to register.
- June 2 **Agribusiness Breakfast-Dairy and Your Diet-**Ann Dicke, Faculty Extension Assistant for 4-H Youth Development, University of Maryland Extension – Carroll County, 8 to 9am, Baugher's Restaurant, Westminster MD, Must call 410-386-2760 or email mabbott@umd.edu to register.

Visit our web site at <http://extension.umd.edu/carroll-county>

For more event listings visit

<http://www.agnr.umd.edu/AGNRCalendar/>

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If you would like to be removed from our mailing list, please call: 410-386-2760 or 1-888-326-9645.

If you have a disability that requires special assistance for your participation in a program please contact the Carroll County Extension Office at 410-386-2760, Fax: 410-876-0132, two weeks prior to the program.

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Preventing Combine Fires



Dry field conditions that are ideal for a successful fall harvest also bring the danger of combine fires. Dry crop residue provides the tinder, and a small spark or heat source is all that is necessary for a combine fire to start. Combine fires can lead not only to lost time but substantial property damage and even injury or loss of life.

Keep Your Equipment Clean

What can you do to lessen your risk of a combine fire? First and foremost, prevention is essential. Remember the old saying, “an ounce of prevention is worth a pound of cure.” Cleanliness and maintenance are essential for combine fire prevention. Use a pressure washer or a compressed air blowgun to thoroughly clean and remove dust, dirt, grease, and crop residues from your equipment. Many farmers also find a hand-held gas-

powered leaf blower useful for cleaning equipment in the field. Not only will you have eliminated the “tinder” from which a fire can start, but you will have equipment that will run cooler and more efficiently. Regardless of how busy you may be, take the time to keep your equipment clean.

Pay Special Attention to Routine Maintenance

Check lubricant levels often, and grease fittings regularly. Fix leaking oil, fuel, or hydraulic lines promptly. Check belts for proper tension and wear to reduce friction. Carefully check bearings for excessive heat—overheated bearings are a major cause of combine fires. Pay particular attention to the exhaust system, checking for leaks, damage, or an accumulation of crop residue. High heat or a spark from the exhaust can easily ignite dry crop residue. Take a close look at the wiring system, checking for exposed wiring or insulation deterioration. Remember, a blown fuse indicates an electrical problem—never replace a blown fuse with a new fuse of higher amperage.

Special Precautions for Refueling

When refueling becomes necessary, always shut off the engine and let the equipment cool for 15 minutes before

you refuel. Extinguish all sources of flame and smoking materials before refueling. If fuel spills on the engine, wipe off any excess and allow the fumes to dissipate. Never store flammable liquids in glass or nonapproved containers. The few minutes that you spend safely refueling are insignificant compared to the property damage or injury that can be caused by a fire.

What If, Despite Our Best Efforts at Prevention, a Fire Does Occur?

Being prepared can prevent substantial loss. Experts recommend that at least one fully charged 10-lb. ABC fire extinguisher be carried on all equipment. Better yet, carry two: one in the cab and one where it can be reached from the ground. The cost of fire extinguishers is insignificant when compared with the cost of your equipment. Remember that any partial discharge from an extinguisher requires it to be recharged. Visually check your extinguishers monthly, looking for cracks in the hose and inspecting the gauge to see if the extinguisher is fully charged. Have a professional fire extinguisher company inspect your fire extinguishers

annually. Carry your cell phone or 2-way radio with you at all times so you can summon help. If a fire does occur, CALL 911 FIRST, and then attempt to extinguish the fire by pulling the pin on the fire extinguisher and squeezing the handles together. Aim the nozzle at the base of the fire and sweep from side to side. Remember P.A.S.S., which stands for Pull, Aim, Squeeze, Sweep.

By exercising proper fire prevention and preparedness and keeping your equipment well maintained and clean, you can help ensure a safe harvest season.

References

National Ag Safety Database
Preventing Farm Equipment Fires
Nebraska Forest Service, Lincoln, NE
<http://www.cdc.gov/nasd/>

Reviewed by

Matthew D. Stevens
Deputy State Fire Marshal
Office of the Maryland State Fire Marshal
Certified Fire Investigator and Bomb Technician

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Preventing Combine Fires

by

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