Dave’s Ramble

“Let’s take a pledge my friends” to raise up a generation free of anxiety and phobia; Americans, carefree and bold. I’ll admit the American spirit of discovery has led to some amazing blunders, but we learn. Thanks to Rachel Carson’s scientific study, we amended our ways, banned DDT and recovered from Silent Spring. We somehow made it beyond the hippy craze, endured the 1974 ice age and we will overcome the challenges of global warming. The terror of the natural world has left us sheltered in place; crippled with mind fear, swatting and swearing as soon as we venture outside. What would our forefathers think?

The things that I did as child naturalist, atrocities by today’s standards such as: drank from a stream, peed in the same stream only down river; teased snakes and bees or just shot them with a bb gun; slept in a cardboard box fort shoved under a bush; never paid much attention to mosquitos or ticks; ate fruits and vegetable straight from the garden, cutting the worms out first of course; and paused only momentarily from ball playing while the DDT spray truck rolled by.

If you consider environmental law of significance, it was during the Nixon administration that most gains came to fruition, namely the formation of EPA in 1970. Farmers became Certified Pesticide Applicators by examination in the early 80’s and IPM into the 90’s was the rage. We marveled at the advances of agricultural sciences; as overnight we went from umbrellas to air-conditioned cab tractors with computerized controls. Agricultural chemicals became less toxic with specified modes of action mimicking the natural world, coining the new reduced risk term - biopesticides. Genetic engineering, having to endure some early acceptance bumps and bruises, is now mainstream; further lessening the need for pesticide applications and IPM strategies have been incorporated into every labeled agricultural chemical.

This melding of science and conciseness of the natural world will propel the next generation into safe and secure environment, making organic and conventional method inseparable. I foresee a new agriculture; therefore a new pledge, “We the American people are a bold and carefree people of an organic earth.”

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Calendar of Events

Mark Your Calendars --- Plan To Participate

♦ May 29 - Strawberry Twilight, Wye REC
♦ August 8 - Crops Twilight & BBQ, Upper Marlboro

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Inside This Issue

• New Location for AA County Extension Office
• Spring & Summer Meetings
• Bay Area Fruit School Videos
• Respirator Recall
• Vegetable & Agronomic Crop Insects
• Custom Rate Survey Results
• Soybeans & Corn in Maryland
• Maryland Woodland Stewards
• MD’s New Nutrient Management Regulations
• Requirements for Incorporation of Organic Nutrients
• MDA News
• Environmental Quality Incentives Program
• EPA News
• Guide to Seed Treatment Stewardship
• Rebuilding Oyster Reefs in Harris Creek, MD
• Farmer School - On-line Farming Education Series
Crops Twilight Barbecue & Ice Cream Social
CMREC Upper Marlboro Farm
August 8, 2013

You are invited to attend a Field Crops Research Twilight, Barbecue and Ice Cream Social at the Central Maryland Research & Education Center, 2005 Largo Rd., Upper Marlboro, MD on Thursday, August 8, 2013 from 4:30 to 9 pm. A barbecue dinner will be served at 4:30 pm followed by homemade ice cream prior to the evening tour.

University of Maryland Extension Educators and Specialists will showcase their field crop, vegetable and fruit research plots. The twilight tour highlights will include:

- Vegetable integrated pest management and reduced risk control methods
- Field crops research updates
- Meadow orchard concept and Fruit research update for apples, peenots, blueberries and beach plums
- A vineyard research update for wine grapes

Barbecue Begins at 4:30
Ice Cream Served at 5:15
Crops Twilight at 6:00

Please arrive on-time as the tour will start promptly at 6:00 pm. This event is free. However, a reserved meal ticket is required.

If you need special assistance to participate, please contact the Anne Arundel County Extension office at 410-222-3906 by August 5, 2013.

For full meeting details, and registration information contact any of the Southern Maryland Extension offices. For more information contact David Myers at the Anne Arundel County Extension office at 410-222-3906

Missed the Bay Area Fruit School?

Videos are on the web at QACTV:

- Sprayers for Fruit Culture
  http://www.youtube.com/watch?v=RTEEOhUDVv8&feature=list=PL6EF12A92A0118B03
- Establishing Native Bee Habitats
  http://www.youtube.com/watch?v=R7NpC4atNN0&feature=list=PL6EF12A92A0118B03

Anne Arundel County Extension
Moves to the Farm

The Anne Arundel County Extension office has officially moved to the former Naval Academy Dairy Farm located off Route 175 in Gambrills, MD.

New address: 97 Dairy Lane
Gambrills, MD 21054

New Phone: 410-222-3906

SPRING MEETINGS
Mark your calendars now and plan to be a part of the Spring & Summer meetings.

STRAWBERRY TWILIGHT
Wednesday, May 29, 2013
6 – 8 PM
Wye Research and Education Center
211 Farm Lane
Queenstown, MD

The 2013 Annual Strawberry Twilight Meeting at the WREC in Queenstown, MD, will be held Wednesday, May 29 from 6-8 PM, rain or shine.

University of Maryland and USDA specialists will discuss current research, other small fruit growing topics, and “program production” of small fruit. We'll have refreshments and pre-registration is not necessary. If you need special assistance to attend this program, please call Debby Dant at 410-827-8056 x 115, no later than May 23, 2013.

For additional program information, contact Michael Newell, Horticulture Crops Program Manager, 410-827-7388 or mnewell@umd.edu
As we look out our windows we see the world becoming green again. The leaves are returning to the trees and the grass is growing thick and lush. This is the time that farmers begin to sow their seeds and cultivate a new crop. New farmers are eager to get started filling their land but may feel a little overwhelmed. Luckily, a new program is available to serve new farmers through a grant funded by the USDA and NIFA. The Beginning Farmer Success program is an initiative that partners University of Maryland Extension, the University of Maryland Eastern Shore, Southern Maryland Agricultural Development Commission (SMADC), and Future Harvest – Chesapeake Alliance for Sustainable Agriculture (CASA). The program aims to increase the number of successful beginning farmers and acreage farmed by them in Maryland, with an emphasis on practical training for new farmers, including underserved, limited resource, socially disadvantaged, minority and ethnic as well as explorer farmers. These partners bring together an online arsenal of resources through http://extension.umd.edu/newfarmer. The website was launched on April 2nd and will offer new farmers an online portal to agricultural information in a wide array of enterprises. Farmers that are still trying to narrow their focus can walk through the phases of the program: Exploration, Refinement, Development, and Implementation. Publications, videos, and links to other resources provide the foundation for the site. Beginning farmer training and mentoring is also of prime importance to the Beginning Farmer Success program. The site links new farmers to training and mentoring programs provided through Future Harvest – CASA and SMADC. New farmers can also find information about business plans, certifications, and setting up a farmstead. For more information please visit our site at http://extension.umd.edu/newfarmer or contact the program coordinator, Andrea Rice, at amrice@umd.edu.

**Vegetable & Agronomic Crop Insects**
Joanne Whalen, Extension IPM Specialist; jwhalen@udel.edu

**Cabbage**
Continue scouting fields for imported cabbage worm and diamondback larvae as soon as plants are placed in the field. With the recent warm temperatures, we are starting to see an increase in moth egg laying activity. As a general guideline, a treatment is recommended if you find 5% of the plants infested with larvae.

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**JUST-IN-TIME PESTICIDE INFO**
Respirator Recall
The information is time-sensitive pesticide information provided by the University of Maryland Extension Pesticide Education & Assessment Program.

**ACTION DATE:** Immediate

**ISSUE:** Moldex has issued a recall for some of its 7000 Series half-mask respirators.

Moldex determined the cartridges for the models being recalled had gas/vapor breakthrough rates that did not meet the NIOSH standard. Therefore, they have issued a voluntary recall and stop sale of the following Moldex 7000 series gas or vapor cartridges and assembled respirators with any manufacturing lot number before 121112000 (December 11th, 2012). Owners should IMMEDIATELY stop using any of models being recalled and return them to Moldex, which will pay the return freight charges and replace the products at no charge. These respirators could have been purchased through a number of dealers, including Grainger and Gempler.

The models being recalled are:
- 7100, 7101, 7102, 7103, 7111, 7112, 7113, 7140, 7171, 7172, 7173, 7200, 7300, 7400, 7500, 7600, 7601, 7602, 7603, and 7640.

To arrange the return of affected models, or for questions, contact Moldex Customer Service at 800-421-0668 ext. 550.
Peas
Be sure to sample peas for pea aphids as soon as small seedlings emerge. On small plants, you should sample for aphids by counting the number of aphids on 10 plants in 10 locations throughout a field. On larger plants, take 10 sweeps in 10 locations. As a general guideline, a treatment is recommended if you find 5-10 aphids per plant or 50 or more aphids per sweep.

Alfalfa
Continue to scout fields for both alfalfa weevil and pea aphids. Under dry weather conditions, you may need to reduce the following thresholds, especially when both insects are present in a field. As a general guideline, you should consider a treatment in alfalfa less than 10 inches tall if you find 40-50 aphids per stem. The treatment threshold for alfalfa 10 inches or taller in height is 75-100 per stem. Beneficial insects can help to crash aphid populations and as a general rule, you need one beneficial insect per every 50-100 aphids to help crash populations. For alfalfa weevil, the following thresholds, based on the height of the alfalfa, should be used as a guideline when making a treatment decision: up to 11 inches tall – 0.7 per stem; 12 inches tall – 1.0 per stem; 13 – 15 inches tall – 1.5 per stem; 16 inches tall – 2.0 per stem; 17 – 18 inches tall – 2.5 per stem.

Small Grains
It appears that we could see head emergence in some barley fields by next week. Once grain heads have emerged, you should begin sampling for grass sawfly and armyworm larvae. Although we can see economic damage from local overwintering armyworm populations, we often see significant outbreaks in years when moths coming from the south migrate to our area. You can look at the following link from Kentucky that compares their moth flights this year compared to 2006 & 2008 – which they consider outbreak years. (http://www.uky.edu/Ag/IPMPrinceton/counts/taw/tawgrap.htm). Currently moth populations are low in their traps but this week of warm weather could cause a significant increase in moth activity. Armyworm larvae are nocturnal so look for larvae at the base of the plants during the day. As a general guideline, a treatment should be considered if you find one armyworm per foot of row for barley and 1-2 per foot of row for wheat. Although armyworms initially feed in lower canopy on the leaves, under drought conditions we could see them quickly moving to the heads. In addition, barley is more susceptible to damage and early head clipping so be sure to scout carefully for armyworm. Since sawflies feed on the plants during the day, small sawfly larvae can often be detected early using a sweep net. However, there is no threshold for sweep net samples. Once sawfly larvae are detected, sample for larvae in 5 foot of row inner space in 5-10 locations in a field to make a treatment decision. You will need to shake the plants to dislodge sawfly larvae that feed on the plants during the day. As a guideline, a treatment should be applied when you find 2 larvae per 5 foot of row inner space or 0.4 larvae per foot of row. If armyworms and sawflies are present in the same field, the threshold for each should be reduced by one-half. The higher rates of insecticides are needed for grass sawfly control.

Continue to watch for winter grain mite activity in no-till wheat fields, especially in fields planted into corn stubble. Although the current summer-like conditions are not favorable for this mite, the predicted cooler temperatures this weekend are favorable for increases in populations. Remember that these mites do not cause the yellowing characteristic of spider mite feeding. Heavily infested fields appear grayish or silvery, a result of the removal of plant chlorophyll by mite feeding. When high infestations feed on the plants for several days, the tips of the leaves exhibit a scorched appearance and then turn brown. Many of the infested plants do not die, but become stunted and produce little forage or grain; damage on young plants, however, is more severe than on large, healthy ones. Damage may also be greater in plants stressed by nutrient deficiencies or drought conditions. Heavy spring infestation can result in reduced yields, so be sure to check for mites if fields appear off color.

Timothy
Cereal rust mites remain active in fields so if you have not checked for this pest, be sure to sample all fields. Symptoms can appear as retarded growth, leaf curling, stunting, and plant discoloration. Injured plants appear to be drought stressed even when adequate moisture is available for plant growth. There are no established economic thresholds for the pest; however, treatment is recommended in fields with a previous history of cereal rust mites and/or when 25% of the plant tillers exhibit curled tips of the new leaf blades within several weeks following green-up. The use of a 20x-magnifying lens is often necessary to find mites on leaves. The only effective and labeled material on timothy is Sevin XLR Plus. Be sure to read the label for information on the number of applications per season as well as the days to harvest. For effective rust mite control, the use of the higher labeled rate and at least 25 gal/acre of carrier to get good coverage of leaf surfaces generally results in better control.

2013 Custom Rate Survey Results Available
Financial and economic considerations such as limited capital, untimely cash flow, insufficient labor, small acreage or other reasons require farmers to hire custom service for field operations. Custom work charges are determined by demand and supply and are negotiated between farmers and custom operators. The purpose of Fact Sheet 683 is to provide information on custom work charges in Maryland and to provide data to assist in decision making regarding purchasing equipment. Custom rates in this publication may not suit all custom operators and those hiring custom work. It is important that operators calculate their own custom costs. It is also important that farmers create their own budgets which include their variable costs and fixed costs and do not rely only on custom rates to determine their cost of production. FS 683 can be accessed online at:
Soybeans & Corn in Maryland

The Soybean Variety Test results have been posted to the MD CROPS website:
http://mdcrops.umd.edu/Soybeans/2012_af32_final.pdf
Latest soybean and corn Trial Results available at:
http://mdcrops.umd.edu/corn/AgronomyFactsNo54_11_07_12.pdf

Maryland’s New Nutrient Management Regulations

- What You Need to Know and Do to Comply
- Summary of Fall and Winter Nutrient Application Requirements Now in Effect
See Attachment

Requirements for Incorporation of Organic Nutrients:
Guidance on implementation of nutrient management regulatory requirements
April 8, 2013

This information is intended to clarify site conditions that may exempt a producer from the requirement to incorporate or inject organic nutrient sources within 48 hours. It also provides guidance as to the type of documentation that will need to be kept as part of the records for implementation of a nutrient management plan when site conditions allow an exemption from this requirement.

The following is a list of site conditions that exempt a producer from the requirement to incorporate or inject an organic nutrient source within 48 hours:
1. Livestock manure deposited directly by animals
2. Permanent pastures
3. Land used for hay production
4. Fields which are defined as being highly erodible land (HEL) following USDA, NRCS Field Office Technical Guide and determination protocols. For purposes of this exemption these fields may be documented by a FSA map or by a SCWQ plan map verified with a SCD representative signature (either must be included with NMP).

5. Fields in which current soil conservation & water quality plan requirements prohibit or otherwise restrict soil disturbance. Documentation of this prohibition must be substantiated by a RUSLE calculation to compare erosion factors with and without incorporation or injection. In short, manure incorporation is exempted only if a RUSLE calculation shows that soil sediment delivery exceeds T, even when the best technology available in the market is used.
   a. if incorporation/injection results in sediment delivery in excess of T, then the field is exempt from incorporation/injection requirements, specifically:
      i. this comparison may first be run using incorporation equipment the producer has on hand or prefers to use;
      ii. if the above comparison exceeds T, then the comparison must be re-run using best available technology or equipment that minimizes soil disturbance such as vertical tillage or an injector;
      iii. only if the latter comparison results in sediment delivery in excess of T, will the field then be exempt from incorporation/injection requirements;
      iv. if the sediment delivery value does not exceed T in the RUSLE calculated using best available technology, then the equipment must be ultimately used to incorporate any applied organic nutrients in the specific fields on which RUSLE was run.
   b. the RUSLE calculation should be based on the year of organic nutrient application for the crop that receives the application;
   c. the RUSLE calculation should be done on a field by field basis;
   d. only professionals recognized as trained and qualified to run RUSLE including a NRCS employee, MDA nutrient management certified consultant including a farmer certified to write nutrient management plans, NRCS technical service provider (TSP), or staff working in soil conservation district may prepare the RUSLE; and
   e. documentation must include operator, account ID field name/number, T designation, sediment delivery value with and without incorporation, and signature (include nutrient management certification ID number if applicable) of the RUSLE preparer.

6. Fields, other than HEL, which are restricted from disturbance due to an USDA or other legally recognized contract or requirement. Documentation should include pertinent information copied from the contract identifying the operator and delineating restrictions which prohibit soil disturbance.

7. Land where nutrients are applied to a growing crop through spray irrigation.

8. Small grains planted for harvest, either as grain or silage, will be considered to be a standing crop, and therefore exempt from incorporation of organic nutrient sources during spring green up.

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**MDA Reports Weights & Measures Law Violations; Reports Cover January 1 through March 13, 2013**

ANNAPOLIS, MD (March 25, 2013) – The Maryland Department of Agriculture (MDA) Weights and Measures Section inspects and regulates devices used to determine the quantity of commodities as diverse as fuel oil, food products, livestock, grain, and precious metals. The Weights and Measures Section reported enforcement activity between January 1 and March 13, 2013, which is shown below. This announcement is part of MDA’s efforts to make the public aware of the agency’s regulatory activities on a routine basis.

- Safeway #945 of Potomac – On January 17, MDA received $1,000 for a civil penalty assessed for short weight.
- Safeway #107 of Greenbelt – On January 17, MDA received $500 for a civil penalty assessed for short weight.
- Weis #129 of Damascus – On January 23, MDA received $2,000 for a civil penalty assessed for short weight.
- Roots Market of Olney – On January 28, MDA received $500 for a civil penalty assessed for short weight.
- Safeway #2848 of Bethesda – On January 31, MDA received $500 for a civil penalty assessed for short weight.
- Whole Foods #52 of Gaithersburg – On February 13, MDA received $500 for a civil penalty assessed for short weight.
- Grand Mart of Gaithersburg – On February 19, 2013 MDA received $750 for a civil penalty assessed for short weight.

During FY 2012, MDA issued 93 civil penalties that amounted to $94,250, most for packaging short weight violations and price misrepresentation. MDA completed field inspections of 8,261 package lots with 19.4 percent in violation; 16,002 price scanning and method of sale was inspected with 3.4 percent in violation. MDA field inspectors conducted 1,067 large scale inspections, with 16.1 percent in violation; 743 medium scale inspections, with 16 percent in violation; and 8,385 small scale inspections, with 21.5 percent in violation. MDA also inspected 28,970 retail gasoline meters, with 19.6 percent in violation;
481 LP gas meters, with 27.8 percent in violation; and 1,104 vehicle tank and rack meters, with 12 percent in violation. Inspectors tested 134 grain moisture meters, with 24.6 percent in violation. Other inspections include 2,072 tare inspections, with 11.9 percent in violation; and 1,294 inspections of delivery tickets, with 0.7 percent in violation. The state metrology lab conducted tests on 1,726 weights, with 13.3 percent rejected; 34 volumetric measures, with 41.2 percent rejected; 31 temperature devices, 2 timing devices and 405 grain samples. The lab completed National Voluntary Laboratory Accreditation Program (NVLAP) re-accreditation in November 2011.

MDA also investigated 584 consumer complaints during FY 2012, most related to complaints about the accuracy of retail motor fuel dispensers. That is an average of 2.4 complaints investigated every work day.

MDA's Regulatory Information Center is designed to provide information to the public about enforcement actions the department takes in response to violations of state laws or regulations. This information includes administrative, civil and criminal enforcement actions. For more information, visit the MDA website.

For more than 35 years, MDA has been protecting consumers and the environment and ensuring fairness in the marketplace through enforcement of the law. MDA strives for swift resolution to violations of the laws in the Agriculture Article and the deterrence of future violations by the regulated community. For more information about the Weights and Measures program, see the Weights and Measures AgBrief.

State Department of Agriculture Joins with Maryland Public Television to Showcase Maryland Agriculture

Thirteen-Part Television Series to Air this Fall

ANNAPOLIS, MD (March 8, 2013) - The Maryland Department of Agriculture (MDA) in cooperation with Maryland Public Television (MPT) is co-producing a 13-part television series showcasing many facets of Maryland farming. The series of half-hour shows tentatively titled “The Maryland Farmer” will report on challenges facing today's farmers and help to bridge the widening “understanding gap” between farmers and the Maryland consumer. Funded with private contributions, production is now underway. The series will air this fall featuring diverse agricultural operations all across the state.

“We want this series to help people understand how diverse farming is, even in a small state like Maryland, and for viewers to learn about the process of farming,” said Agriculture Secretary Buddy Hance. “The series aims to put a human face on Maryland agriculture, and tell the stories of the industry that built this nation and continues to feed the world. We are very excited about the ideas MPT has presented and look forward to seeing this series take shape over the summer.”

MPT Executive Producer Michael English, former editor of Maryland Farmer newspaper, writer of Public Television’s Farm Day series, and producer of MPT’s long-running Outdoors Maryland series, is leading the project with Series Producer Robert Neustadt who has produced television for A&E, Fox, NBC, Discovery and other public television affiliates.

Most Americans once lived or worked on farms or had family and friends who did. With each generation, the nation has grown further away from its agricultural roots. The goal of the MPT series is to bring residents back to the farm and show them how their food is grown and harvested. The program will take viewers from the mountains of Western Maryland, to the rolling hills of the Piedmont, to the broad, flat fields of the Eastern Shore – to explain the complex story of growing food and fiber in Maryland. Each episode will include a series of short magazine-style segments about Maryland farmers, farms and agribusiness. Episodes will be produced on location at farms and agribusinesses throughout the state. Crews are on location now.

When the series is complete, it will be broadcast several times on MPT and available for viewing on several websites (including MPT, MDA and YouTube). It will also be distributed through libraries, schools and community groups.

Program sponsors include: Maryland Grain Producers Utilization Board, Maryland Agricultural & Resource-Based Industry Development Corporation, Mid-Atlantic Farm Credit, Maryland Farm Bureau, Maryland Soybean Board, Maryland Department of Agriculture/Maryland’s Best, Maryland Agricultural Education Foundation, Maryland Nursery and Landscape Association, Arthur W. Perdue Foundation, Mid-Atlantic Dairy Association, Maryland Association of Soil Conservation Districts (MASCD), Maryland Grape Growers Association, Harford County Government, MAR-DEL Watermelon Association and the Delmarva Poultry Industry, Inc.

2013 Environmental Quality Incentives Program (EQIP)

Do you want to improve your operation? Beginning and socially disadvantaged agricultural producers are encouraged to participate in these programs. Anne Arundel and Prince George's agricultural producers should contact their local soil conservation district to learn more.
EQIP is a voluntary conservation program that helps farmers and owners of agricultural land, including forest landowners, reduce pollution and improve natural resources. EQIP provides technical and financial assistance to help people plan, install and implement structural, vegetative and/or management conservation practices. EQIP contracts are generally one to three years up to a maximum term of 10 years.

**Maryland EQIP Initiatives and Supported Programs:**
For more information please visit [www.md.nrcs.usda.gov/programs/equin/equip.html](http://www.md.nrcs.usda.gov/programs/equin/equip.html) or contact Joseph A. Haamid, NRCS District Conservationist, at 410-571-6757 (Anne Arundel) and 301-574-5162 (Prince George's); or email joseph.haamid@md.usda.gov

Buffer Zone Calculator is Available to Assist Soil Fumigant Applicators

An electronic Buffer Zone Calculator is available in EPA's [Soil Fumigant Toolbox](http://www.epa.gov/pesticides/reregistration/soil_fumigants/soil-fum-buffer-zones.html). The EPA developed this new tool to help soil fumigant applicators, growers, enforcement personnel and others determine the buffer zone distances now required by soil fumigant product labels. Buffer zones provide distance between the edge of fields treated with pesticides and bystanders, people who live, work or otherwise spend time nearby.

When the final set of soil fumigant label changes went into effect on December 1, 2012, implementing important new protections for workers and bystanders, buffer zones were among the mitigation measures that began appearing on fumigant labels. As of that date, only soil fumigant products bearing all of the required risk mitigation measures may be sold and distributed by registrants. Growers and applicators can still apply products bearing old labels until supplies are exhausted. However, labels of newly purchased products require applicators to calculate and observe buffer zones when applying soil fumigants.

The EPA-developed Buffer Zone Calculator is specific to each fumigant product and is based on look-up tables on the product labels. In addition to calculating buffer zone distances, the calculator can also be used to quickly calculate buffer zone reductions through the use of credits and modifications to application parameters. Applicators will need to verify that the buffer zone results from the calculator are consistent with the buffer zone requirements on product labels. If there are any discrepancies, applicators should follow the label.


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**EPA Site Quick Finder**

**About EPA's Pesticides Program**
Overview of EPA's program evaluating potential new pesticides and uses, providing for special local needs and emergency situations, reviewing safety of older pesticides, registering pesticide producing establishments, enforcing pesticide requirements, pesticide issues in the works, overview of risk assessment in the pesticide program

**Types of Pesticides**
Pesticides are often grouped according to the type of pest they control or by chemical or source.

- type of pest
- chemically-related

**Frequently Asked Questions**
Answers to questions from the public.

**Fact Sheets**
Search general interest and technical fact sheets.

**Information Sources**
Additional information of general interest.

- General information
- hotlines
- information centers
- databases

**Pesticide Program Reports**
Reports produced by the Office of Pesticide Programs

- Annual Reports, Performance Management & Accountability
- Pesticide Industry Sales and Usage, Progress Reports
- Restricted Use Products Reports

**Pesticide News Stories**
Pesticide related articles appearing in news media

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**EPA Environmental News**

EPA Survey Finds More Than Half of the Nation’s River and Stream Miles in Poor Condition

WASHINGTON — Today, the U.S. Environmental Protection Agency released the results of the first comprehensive survey looking at the health of thousands of stream and river miles across the country, finding that more than half – 55 percent – are in poor condition for aquatic life.

“The health of our Nation’s rivers, lakes, bays and coastal waters depends on the vast network of streams where they begin, and this new science shows that America’s streams and rivers are under significant pressure,” said Office of Water Acting Assistant Administrator Nancy Stoner. “We must
continue to invest in protecting and restoring our nation’s streams and rivers as they are vital sources of our drinking water, provide many recreational opportunities, and play a critical role in the economy.”

The 2008-2009 National Rivers and Stream Assessment reflects the most recent data available, and is part of EPA’s expanded effort to monitor waterways in the U.S. and gather scientific data on the condition of the Nation’s water resources.

EPA partners, including states and tribes, collected data from approximately 2,000 sites across the country. EPA, state and university scientists analyzed the data to determine the extent to which rivers and streams support aquatic life, how major stressors may be affecting them and how conditions are changing over time.

Findings of the assessment include:

- **Nitrogen and phosphorus are at excessive levels.** Twenty-seven percent of the nation’s rivers and streams have excessive levels of nitrogen, and 40 percent have high levels of phosphorus. Too much nitrogen and phosphorus in the water—known as nutrient pollution—causes significant increases in algae, which harms water quality, food resources and habitats, and decreases the oxygen that fish and other aquatic life need to survive. Nutrient pollution has impacted many streams, rivers, lakes, bays and coastal waters for the past several decades, resulting in serious environmental and human health issues, and impacting the economy.

- **Streams and rivers are at an increased risk due to decreased vegetation cover and increased human disturbance.** These conditions can cause streams and rivers to be more vulnerable to flooding, erosion, and pollution. Vegetation along rivers and streams slows the flow of rainwater so it does not erode stream banks, removes pollutants carried by rainwater and helps maintain water temperatures that support healthy streams for aquatic life. Approximately 24 percent of the rivers and stream monitored were rated poor due to the loss of healthy vegetative cover.

- **Increased bacteria levels.** High bacteria levels were found in nine percent of stream and river miles making those waters potentially unsafe for swimming and other recreation.

- **Increased mercury levels.** More than 13,000 miles of rivers have fish with mercury levels that may be unsafe for human consumption. For most people, the health risk from mercury by eating fish and shellfish is not a health concern, but some fish and shellfish contain higher levels of mercury that may harm an unborn baby or young child’s developing nervous system.

EPA plans to use this new data to inform decision making about addressing critical needs around the country for rivers, streams, and other waterbodies. This comprehensive survey will also help develop improvements to monitoring these rivers and streams across jurisdictional boundaries and enhance the ability of states and tribes to assess and manage water quality to help protect our water, aquatic life, and human health. Results are available for a dozen geographic and ecological regions of the country.

More information: [http://www.epa.gov/aquaticsurveys](http://www.epa.gov/aquaticsurveys)

**EPA Releases Fact Sheets on Low Impact Development**

The EPA has just released 7 Fact Sheets on Low Impact Development (LID). For more information, go to: [http://water.epa.gov/polwaste/green/bbfs.cfm](http://water.epa.gov/polwaste/green/bbfs.cfm).

1. **Benefits of LID: How LID Can Protect your Community’s Resources**  
   [PDF](http://water.epa.gov/polwaste/green/upload/bbfs1benefits.pdf).  
   (2 pp, 1.3MB) LID Fact Sheet #1: Challenges the perception that LID isn't worthwhile and provides general background information that outlines hydrologic and economic benefits provided by LID.

2. **Terminology of LID: Distinguishing LID from other Techniques that Address Community Growth Issues**  
   [PDF](http://water.epa.gov/polwaste/green/upload/bbfs2terms.pdf).  
   (2 pp, 568K) LID Fact Sheet #2: Addresses LID's place in the jumble of terms for managing the environmental impacts of growth that coexist today and describes and distinguishes these terms.

3. **Costs of LID: LID Saves Money and Protects Your Community’s Resources**  
   [PDF](http://water.epa.gov/polwaste/green/upload/bbfs3cost.pdf).  
   (2 pp, 1.7MB) LID Fact Sheet #3: Challenges the perception that LID is too expensive.

4. **Aesthetics of LID: LID Technologies Can Benefit Your Community’s Visual Environment**  
   [PDF](http://water.epa.gov/polwaste/green/upload/bbfs4aesthetics.pdf).  
   (2 pp, 1.9MB) LID Fact Sheet #4: Challenges the perception that LID is unattractive.

5. **Effectiveness of LID: Proven LID Technologies Can Work for Your Community**  
   [PDF](http://water.epa.gov/polwaste/green/upload/bbfs5effectiveness.pdf).  
   (2 pp, 1.7MB) LID Fact Sheet #5: Challenges the perception that LID doesn't work.

6. **Maintenance of LID: Communities Are Easily Managing LID Practices**  
   [PDF](http://water.epa.gov/polwaste/green/upload/bbfs6maintenance.pdf).  
   (2 pp, 1.7MB) LID Fact Sheet #6: Challenges the perception that LID is too hard or costly to maintain.

7. **Encouraging LID: Incentives Can Encourage Adoption of LID Practices in your Community**  
   [PDF](http://water.epa.gov/polwaste/green/upload/bbfs7encouraging.pdf).  
   (2 pp, 492K) LID Fact Sheet #7: Highlights incentive strategies to catalyze LID.
EPA Moves to Ban 12 D-Con Mouse and Rat Control Products

Action Will Prevent Thousands of Accidental Exposures Among Children Each Year

WASHINGTON – The U.S. Environmental Protection Agency is moving to ban the sale of 12 D-Con mouse and rat poison products produced by Reckitt Benckiser Inc. because these products fail to comply with current EPA safety standards. Approximately 10,000 children a year are accidentally exposed to mouse and rat baits; EPA has worked cooperatively with companies to ensure that products are both safe to use around children and effective for consumers. Reckitt Benckiser Inc., maker of D-Con brand products, is the only rodenticide producer that has refused to adopt EPA’s safety standards for all of its consumer use products.

“Moving forward to ban these products will prevent completely avoidable risks to children,” said James Jones, acting assistant administrator for EPA’s Office of Chemical Safety and Pollution Prevention. “With this action, EPA is ensuring that the products on the market are both safe and effective for consumers.”

The agency has worked with a number of companies during the last five years to develop safer rodent control products that are effective, affordable, and widely available to meet the needs of consumers. Examples of products meeting EPA safety standards include Bell Laboratories’ Tomcat products, PM Resources’ Assault brand products and Chemsico’s products.

The EPA requires rodenticide products for consumer use to be contained in protective tamper-resistant bait stations and prohibits pellets and other bait forms that cannot be secured in bait stations. In addition, the EPA prohibits the sale to residential consumers of products containing brodifacoum, bromadiolone, difethialone, and difenacoum because of their toxicity to wildlife.

For companies that have complied with the new standards in 2011, EPA has received no reports of children being exposed to bait contained in bait stations. EPA expects to see a substantial reduction in exposures to children when the 12 D-Con products that do not comply with current standards are removed from the consumer market as millions of households use these products each year.

For a complete list of the homeowner use rat and mouse products that meet the EPA’s safety standards, visit: http://www.epa.gov/pesticides/mice-and-rats/rodent-bait-station.html.

For a complete list of Reckitt Benckiser Inc.’s non-compliant products, visit: http://www.epa.gov/pesticides/mice-and-rats/cancellation-process.html#cancellation.

The EPA’s final Notice of Intent to Cancel will be available in the EPA docket EPA-HQ-OPP-2013-0049 at www.regulations.gov. After Federal Register publication of the Notice of Intent to Cancel, Reckitt Benckiser will have 30 days to request a hearing before an EPA Administrative Law Judge. If a hearing is not requested, the cancellations become final and effective.

Information on Rodenticide products and EPA’s review is available at: http://www.epa.gov/pesticides/reregistration/rodenticides/

More information on preventing and controlling rodents is available at: http://www.epa.gov/pesticides/controlling/rodents.htm

CDMS
Pesticide Labels and MSDS On-Line at: http://www.cdms.net/

The Guide to Seed Treatment Stewardship is now available online at: http://seed-treatment-guide.com/

“The Guide to Seed Treatment Stewardship” is the product of industry-wide collaboration between seed companies, seed treatment providers and universities – and it draws from data collected worldwide. Jointly produced by the American Seed Trade Association and CropLife America, its purpose is to provide farmers and seed companies with critical information and up-to-date guidelines for managing treated seeds effectively to minimize the risk of exposure to non-target organisms.

The Guide has been enthusiastically endorsed by the National Corn Growers Association, the American Farm Bureau Federation and the American Soybean Association, and has been shared with the Environmental Protection Agency and the U.S. Department of Agriculture — both of whom have applauded the industry’s initiative in this effort.

As seed treatment technology advances, more resources are developed and the needs of the seed and crop production value chain evolve, the Guide will be updated to ensure the latest in seed treatment management information for seed companies and growers.”
From the Field: Rebuilding Oyster Reefs in Harris Creek, MD

Steve Droter, Multimedia Coordinator
Chesapeake Bay Program

Harris Creek, a tributary of the Choptank River on Maryland's eastern shore, is a key component of one of the largest restoration projects ever undertaken in the Chesapeake Bay. Interviews include Mike Naylor (Maryland Department of Natural Resources), Stephanie Reynolds Westby and Jay Lazar (National Oceanic and Atmospheric Administration), Claire O'Neil and Jeff Price (U.S. Army Corps of Engineers), Melissa Grant (University of Maryland Center for Environmental Science, Horn Point Oyster Hatchery) and Doug West (Oyster Recovery Partnership).

Vimeo (with download link): http://vimeo.com/62092678
YouTube: http://www.youtube.com/watch?v=U8TNeusghYs

CBP website (with blog):
http://www.chesapeakebay.net/blog/post/from_the_field_rebuilding_oyster_reefs_in_harris_creek_md

The American Vegetable Grower eNews highlighted the recently published National Commodity-Specific Food Safety Guidelines for Cantaloupes and Netted Melons or also known as the National Cantaloupe Guidance.

This 40-page document contains the recommended GAPs and GHPs developed by a committee made up of large farmers, marketing organizations, food store chains, and university personnel. Jeff Stoltzfus from Lancaster Co. PA is the closest member of the committee. Available at the following link:

Branching Out, Maryland’s Forest Stewardship Education newsletter, is published four times per year by University of Maryland Extension. Branching Out provides educational information, current news and events and is intended to reach anyone interested in forest stewardship including landowners and natural resource professionals. We encourage you to share this free newsletter with others and invite them to subscribe and review past newsletters by visiting the Branching Out Newsletter Page at:
http://www.naturalresources.umd.edu/Newsletter.html

MEP-300 "Raising Your Home Chicken Flock" has been added to the UME publication list.

http://www.agnr.umd.edu/Extension/agriculture/SmallFlock/files/Raising%20Your%20Home%20Chicken%20Flock_FINAL.pdf
County Website Features:
Anne Arundel County Extension website:
http://extension.umd.edu/anne-arundel-county

Ag Newsletter Production Pointers
The current and past agricultural newsletter additions are available for viewing or copy at:
https://extension.umd.edu/anne-arundel-county/agriculture/anne-arundel-county-agnr-newsletter#

Ag Bulletins
An agricultural bulletin page is also available for viewing or copy under our hot topics section at:
https://extension.umd.edu/anne-arundel-county/agriculture/agriculture-bulletins

Ag Web Modules
New website features in Anne Arundel County - Agricultural Program Teaching Modules:
http://extension.umd.edu/anne-arundel-county/agriculture/farm-production-web-modules

1. Pasture Management
2. Pasture Herbicides
3. Handling Tall Fescue Toxicity Events
4. Modern Vegetable Production Technology for Early Market
5. Vegetable Herbicides for Controlling the Top 10 Weeds of Southern Maryland
6. Sustainable Low Input Strip-Till & No-Till Vegetable Planting Tactics
7. Fruit Establishment Tactics to Maximize Our Coastal Plain Advantage
8. Vineyard and Orchard Weed Control
9. Vineyard Establishment Supplies & Equipment

Farmer School
On-Line Farming Education Series
“Tomorrow’s Farmers” Web Modules”
https://extension.umd.edu/anne-arundel-county/agriculture/tomorrows-farmer-web-modules

Module 1: Introduction to Farming & Course Orientation: “Tomorrow’s Farmers”
Module 2: The Science and Stewardship of Soils
Module 3: Fundamentals of Farm Machinery
Module 4: Plants that Farmers Grow
Module 5: Integrated Pest Management

Future Module Topics:
Farm Business and Enterprise
• Development Modern Vegetable Farmer
• Modern Fruit Farmer
• Grain Farming
• Pasture and Hay Management
• Livestock that Farmers Raise

Whether you grew up on a farm or not, the web modules will open your eyes to the world of farming. A course designed for the young and old alike. It just may make a farmer out of a “city kid” or a “hayseed.”

After viewing the series in its entirety take the Final Exam. All participants receiving a final Exam Grade of 70% or above will receive a “Certificate of Farming Competency,” compliments of the Anne Arundel County Extension Office.

4-H News
Amanda Wahle, 4-H FEA
University of Maryland

Are you between 8 and 18 or know someone who is? If so have you considered joining 4-H?
The Anne Arundel County 4-H program is growing and is always looking for new members and volunteers. The program has community clubs located throughout Anne Arundel County but is also looking for volunteers and members to lead new groups. There are a variety of projects members can participate in including animal science, environmental sciences and human sciences. We are also looking for adults to do seminars or presentations to help 4-Hers learn how they can further their projects. To receive more information, please contact Amanda Wahle in the Anne Arundel Extension Office at 410-222-3900 or at:awahle@umd.edu

Gardening questions? Pest Problems?
The Home and Garden Information Center can help!
Consultants are available by phone Monday -Friday, 8 AM to 1 PM.
Call 1-800-342-2507 or 410-531-1757 or visit the HGIC website at www.hgic.umd.edu
Thanks for Partnering

Thanks for partnering with the University of Maryland Extension, and supporting our programs. I also hope you enjoy this newsletter. If you are no longer interested in receiving this newsletter, please call or write the office for the removal of your name from the mailer.

R. David Myers, Principal Agent
Agriculture and Natural Resources
University of Maryland Extension
Anne Arundel & Prince George’s Counties

Anne Arundel County Extension
97 Dairy Lane
Gambrills, MD 21054
410 222-3906 Fax 410 222-3909

Prince George's County Extension
6707 Groveton Drive
Clinton, MD 20735
301 868-8783

Anne Arundel County Extension
https://extension.umd.edu/sites/default/files/_docs/AA_CoflyerUME%20Update.pdf
For more information, contact Amanda Wahle at awahle@umd.edu or call 410-222-3900

Family & Consumer Sciences
For more information, contact Georgeann Browning gbrownin@umd.edu or call 410-222-3903

Agriculture & Natural Resources
For more information, contact Dave Myers myersrd@umd.edu or call 410 222-3906

Master Gardener Program
For more information, contact Mike Ensor mensor@umd.edu call 410-222-3906

Nutrient Management
For more information, contact Krista Mitchell at kristaw@umd.edu or call 410-222-3906

Sea Grant
For more information, contact Matt Parker at mparke11@umd.edu or call 410-222-3906

Note: Registered Trade Mark® Products, Manufacturers, or Companies mentioned within this newsletter are not to be considered as sole endorsements. The information has been provided for educational purposes only.
**2013 Environmental Quality Incentives Program (EQIP)**

**Do you want to improve your operation?**

Beginning and socially disadvantaged agricultural producers are encouraged to participate in these programs.

Anne Arundel and Prince George’s agricultural producers should contact their local soil conservation district to learn more.

EQIP is a voluntary conservation program that helps farmers and owners of agricultural land, including forest landowners, reduce pollution and improve natural resources. EQIP provides technical and financial assistance to help people plan, install and implement structural, vegetative and/or management conservation practices. EQIP contracts are generally one to three years up to a maximum term of 10 years.

**Maryland EQIP Initiatives and Supported Programs:**

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<th>Description:</th>
<th>Sample Practices:</th>
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| **National Seasonal High Tunnel Initiative:** | • Seasonal High Tunnel System for Crops  
NRCS will assist producers to extend the growing season for high value crops and address resource concerns.  
System is only eligible on land with crop history. Area zoned as “urban” or “residential” may meet program eligibility require. Maximum practice extent 2178 sq. ft.  
Participants must meet minimum definition of agricultural producing operation. | • Critical Area Stabilization  
• Nutrient Management |

| **Organic Farming Initiative:** | • Conservation Crop Rotations  
NRCS assist eligible producers install conservation practices related to current certified organic producers and those transitioning to organic farming. | • Cover Crop  
• Fence  
• Residue and Tillage Management  
• Nutrient Management (organic)  
• Seasonal High Tunnel |

| **Grazing Land:** | • Pasture and hay land planting  
Assistance to plan and implement; rotational grazing systems, establish riparian buffers, and/or apply nutrients more efficiently. For prescribed grazing payments, all payments must be in place and livestock managed according to the plan. | • Access control and fencing  
• Prescribed grazing  
• Nutrient management  
• Water Troughs and Pipelines  
• Heavy Use Area Protection |

For more information please visit [www.md.nrcs.usda.gov/programs/eqip/eqip.html](http://www.md.nrcs.usda.gov/programs/eqip/eqip.html) or contact Joseph A. Haamid, NRCS District Conservationist, at 410-571-6757 (Anne Arundel) and 301-574-5162 (Prince George’s); or email [Joseph.haamid@md.usda.gov](mailto:Joseph.haamid@md.usda.gov)

USDA NRCS is an equal opportunity provider and employer.
The Maryland Department of Agriculture’s (MDA) revised nutrient management regulations took effect October 15, 2012 and are being implemented in stages over the next several years. Following are descriptions of the new requirements along with corresponding deadlines.

**Effective Immediately**
- If you have a one year Nutrient Management Plan (NMP) or a multi-year NMP that was developed before October 15, 2012, it will need to be updated to address new regulatory requirements when it expires or there are changes to your operation that require you to modify the plan, whichever occurs first. The new plan must be developed and implemented in accordance with the revised requirements outlined in *Maryland’s Nutrient Management Manual*.

**Beginning Spring 2013**
- Manure, biosolids and other organic nutrient sources must be injected or incorporated into the soil within 48 hours of application. There are exceptions for spray irrigation on a growing crop, permanent pastures, hay production fields, and highly erodible fields. Information clarifying exceptions and guidance can be found at [www.mda.maryland.gov](http://www.mda.maryland.gov) and click on *Nutrient Management*.

**Beginning Fall 2013**
- Fall application of nitrogen is prohibited on small grains if a fall nitrate test indicates levels greater than 10 parts per million (ppm) for wheat or 15 ppm for barley.
- Cover crops must be planted when organic nutrient sources are applied in the fall.
- Farmers whose fields have a Fertility Index Value (FIV) of 150 or greater are required to use the new *Phosphorus Management Tool* to determine phosphorus rates for plans developed after July 1, 2013.

**Beginning January 1, 2014**
- Farmers are required to establish a 35 foot setback for fertilizer applications adjacent to surface waters and streams. The setback is reduced to 10 ft. when “directed” application methods are used such as directed spray or injection, which reduce the potential for nutrient losses. No crop plants may be grown on the 10 foot setback area with the exception of pasture and hay. Crop plants may be grown on the remaining 25 foot setback, but may not be fertilized unless a “directed” application method is used.
- Livestock access to streams and certain surface waters is restricted by a minimum 10 feet. *Fencing is not a requirement.* The regulations allow soil conservation district staff to evaluate each site to determine whether alternative BMPs such as watering facilities, stream crossings, pasture management techniques or vegetative exclusion will work equally as well as fencing in protecting water quality, while offering farmers more manageable or cost-effective solutions to fencing.

**Beginning July 1, 2016**
- Nutrient applications are prohibited between November 1 and March 1 for Eastern Shore farmers and between November 15 and March 1 for Western Shore farmers. This requirement applies to farmers with 50 or more animal units (*1 animal unit equals 1,000 pounds of live animal weight*).

**Beginning March 1, 2020**
- Farmers with fewer than 50 animal units are prohibited from applying nutrients between November 1 and March 1 on the Eastern Shore and between November 15 and March 1 on the Western Shore.
Summary of Fall and Winter Nutrient Application Requirements Now in Effect

✓ Chemical fertilizer may be applied from September 1-November 15 for a growing crop, as long as University of Maryland recommendations are followed.

✓ Organic nutrients (except poultry litter) may be applied from September 1-November 15 for an existing crop, a fall planted crop, or a crop that is planted the following spring if University of Maryland recommendations are followed.

✓ Poultry litter may be applied in fall for an existing crop or a crop planted for the fall if it is applied following University of Maryland recommendations.

✓ Winter application (November 16-March 1) of chemical fertilizer is prohibited. Exceptions exist for green up of perennial forage crops and small grains as well as greenhouse, cool season grass sod production, vegetable and fruit production. Applications must be made following University of Maryland recommendations.

✓ Use of potash and liming materials is not restricted in winter.

✓ Manure deposited directly by livestock is not restricted at any time of year.

✓ Winter application of organic nutrient sources is permitted on cropland until the 2016 deadline if:
  — an operation has inadequate manure storage through March 1
  — the manure/waste is non-stackable
  — there is no other reasonable option to manage the manure
  — certain restrictions apply

✓ Exceptions to the winter ban on organic nutrient sources also apply to green up of perennial forage crops and small grains as well as greenhouse, cool season grass sod production, and vegetable and fruit production if applications are performed following University of Maryland recommendations.