



Winter 2010

Dave's Ramble

I perceive that we have been rendered neither sober nor inebriated by unnatural toxicants. With our senses dulled, "Toxicant Management!" we cry aloud. Having become tormented souls of toxicant doom; Our water! Our air! Our soil! Such despair embellishes a conjured destiny of a lifeless void, a deep outer space; our only ally and escape: No salt! No Smoke! No Pollen! No Dust! No Dander! No Spores! No Microbes! No Odors! No Vapors! No Carbohydrates! No Fats! No Nutrients! No Metals! No Chemicals! No Carbon Dioxide!

Yet even now hope has been shattered again, as Hubble's eye peered into the darkest space void only to discover another ten thousand galaxies of toxicant doom. Surely, purity must exist!

Alas, winter with its new blanket of white and clear blue sky of cleansed, snowflake filtered air. We remind each other with consternation to always eat the snow on top, as this is the purest snow. Suited in GORE-TEX we traverse into the coldness of this microbial safe haven for the purpose of making snow angels and drinking hot



chocolate. For a moment, we recklessly taunt the Ice Age return and make great decrees against Global Warming as we heap logs upon the blazing fire.

Stop the madness of striving after the wind, declared the wise and benevolent king to the farmers. We have many labors ahead to feed the billions of good people on this earth. When spring returns, the majesty of this earth will prevail and all things will be very good. In our hands lies the balance where even our toxicants will be redeemed. The farmers salted, smoked and sent forth vapors, a sweet aroma and the earth yielded itself plentifully.

Calendar of Events

Mark Your Calendars --- Plan To Participate

- ◆ January 11 - Pesticide Certification Training, DFRC
- ◆ January 16 - Beekeeping 101
- ◆ January 20 - Southern MD Forage Conference, Waldorf
- ◆ January 21 - MDA Buyer-Grower Meeting
- ◆ January 25 - Pesticide Certification Exam – DFRC
- ◆ January 27 - Farm Management Classes for Women
- ◆ January 29 - Central MD Vegetable Mtg., Upperco
- ◆ Feb.5 *Tentative* - Grain Marketing Update , Easton
- ◆ February 5-6 - Terrapin Couples Retreat, College Park
- ◆ February 10 - So. MD Vegetable & Fruit Meeting, Edgewater
- ◆ February 24 - Bay Area Fruit School
- ◆ March 22 - Pasture & Field Crop Workshop NM/PAT, DFRC
- ◆ April 9 - On-Line Nutrient Voucher Recertification
- ◆ April 23 - On-Line Pesticide Applicator Recertification



Inside This Issue

- Fall & Winter Meetings
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Educating People to Help Themselves

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WINTER MEETINGS

Mark your calendars now and plan to be
a part of the winter meetings.

Become a MD 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 two step process:

Step 1: A Private Applicator Certification Training will be conducted at the Davidsonville Family Recreation Center (DFRC) from **6:00 to 8:00 pm** on **January 11, 2010**.

Step 2: A Private Pesticide Applicator Exam will be given at the Davidsonville Family and Recreation Center (DFRC) from **6:00 to 8:00 pm** on **January 25, 2010**.

Beekeeping 101 January 16, 2010



Mike Embrey, University of Maryland Extension Apiculturalist, will be offering a beginning beekeeping class at the Wye Research and Education Center in Queenstown, Maryland. The opening session will be held on **Saturday, January 16, 2010** from **9:00 am -12:00 noon**. Registration fee is \$100.00, which includes the textbook, "The Beekeeper's Handbook, Third Edition" by Diana Sammataro. If you have your own book, the fee will be \$75.00.

You will Learn ...

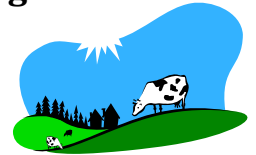
- About bees, in general
- About beekeeping equipment
- How and where to set up and establish a hive (i.e. location, wind, etc.)
- How to use a smoker
- How to hive a package of bees

The classes will be held one Saturday per month through April. A final session will be held approximately the third week of September and will teach how to winterize and protect your hives and bees from diseases and pests.

For registration, contact:
Debby Dant, ddant@umd.edu
Wye Research and Education Center
PO Box 169, Queenstown, MD 21658
410-827-8056 X115, Fax: 410-827-9039

Registration deadline is January 9, 2010, in order to purchase books for each registrant. Please make check payable to: *University of Maryland*. For program information, contact Mike Embrey, 410-827-8056 X148, membrey@umd.edu.

Maryland/Delaware Forage Council Southern MD Hay & Pasture Conference January 20, 2010



Make plans to attend the **Southern Maryland Hay & Forage Conference, January 20, 2010** at the Isaac Walton League Conference Facility in Waldorf, MD. The programs will address key issues and concerns facing hay and pasture producers. The conferences also features displays and exhibits by numerous agribusinesses. More information on the Southern Maryland conference will be available on the web at <http://www.mdforages.umd.edu> or contact Ben Beale, Saint Mary's County at 301-475-4482 or NRCS/Soil Conservation District offices in Maryland.

Southern Maryland Hay & Pasture Conference Wednesday, January 20, 2010 Isaac Walton League, Waldorf, MD

Registration and morning refreshments

8:45 **Welcome** – Ben Beale, Extension Educator, University of Maryland

9:00 **Orchardgrass: Here Yesterday, Gone Today**
-- Dr. Richard Taylor, Extension Agronomist, University of Delaware and Dr. Les Vough, Forage Systems Management Consultant, Southern Maryland RC & D

9:45 **How To Identify Common Grasses, Legumes And Weeds In Your Fields** – Dr. Richard Taylor and R. Jay Ugiansky, Resource Conservationist, NRCS National Plant Materials Center, Beltsville, MD

10:45 Break

11:00 **Forage Management Practices As They Relate To Plant Growth Characteristics** -- Dr. Jim Green, Professor Emeritus of Crop Science, North Carolina State University

12:00 Lunch and visit exhibitors

12:30 Lunch Speaker: Partnerships with the Farm Service Agency

12:45 **Maryland-Delaware Forage Council Report** – Les Vough, President

1:00 **Weed Management In Hay And Pasture Systems** -- Dr. Ron Ritter, Extension Weed Control Specialist, University of Maryland

1:45 **Extending The Grazing Season Can Be Inexpensive - Timing Is The Key** - Dr. Jim Green

2:30 Break

2:40 **Fertility Central: Best Cost Options and Recommendations for Different Forages** -- Ben Beale and Brain Clark- Extension Educators, University of Maryland

3:10 **Bermudagrass Demonstration Trials in Southern Maryland** -- Elmer Dengler, Grazing Specialist Maryland NRCS

3:40 **Pesticide Law Review and Nutrient Voucher Update** – Ben Beale

MDA Buyer-Grower Meeting

January 21, 2010



The Maryland Department of Agriculture has set a date for its annual Buyer-Grower Meeting: **January 21, 2010**. The location

has yet to be determined. Additional details in the upcoming months. Please mark your calendar! We hope to make this year's meeting as successful as the last!



Farm Management Classes for Women at Nine Sites in Maryland & Delaware

The University of Maryland and Delaware Cooperative Extension will conduct Annie's Project during the winter of 2010 at nine sites. Annie's Project focuses on the many aspects of farm management and is designed to empower women in overall farm decision making and to build local networks throughout the state. The target audience is farmwomen with a passion for business, agriculture and involvement in the farm operation. Topics for the sessions cover the five areas of Risk Management – Production, Marketing, Financial, Legal Risk, Human Resources. This course is open to anyone interested in farm management practices.

The course will be **8 sessions starting on Wednesday, January 27, 2010 6-9 pm (Washington County dates differ)** with classroom and computer lab work. Sites range from Western Maryland, Central Maryland, Southern Maryland and Delmarva. The cost of the entire course including meals and materials is \$50.

Please register by January 8th - space is limited. For more information visit the website www.anniesproject.umd.edu or call 410-758-0166. If you require special assistance to attend the classes please contact the site at least two week prior.

Central Maryland Vegetable Growers Meeting

January 29, 2010



This well sponsored, large grower meeting always offers a great deal of vegetable industry information. The

Central Maryland Vegetable Growers Meeting will be held on **January 29, 2010** from **8:00 am to 3:30 pm** at the Friendly Farm Inn, located on Foreston Rd. in Upperco, MD. Pesticide recertification credits are awarded for attending this meeting. **For full meeting details, and to register call the Baltimore County Extension Office at 410 666-1024 today.**

Terrapin Couples Retreat: From the Court to the Classroom

February 5-6, 2010
College Park, MD



Be part of the first ever Terrapin Couples Retreat! This get-away will focus on fun and education so you can come back to the farm relaxed with information to help your farm business. **This two day event will take place February 5 and 6 at the University of Maryland College Park Campus.**

We will begin with a Lady Terps basketball game at Comcast against Georgia Tech. We will dine in the alumni suite during the game that tips at 8:30 pm. Couples will stay overnight in College Park. Classes will begin promptly at 9 am in Symons Hall and will offer a selection of farm management classes. There will also be a short campus tour after lunch before we adjourn.

The retreat is limited to 20 couples and we ask that couples do not take the same courses.

Program Registration Fee: \$100.00 per couple. Cost includes Friday evening meal during the game, game tickets, parking pass if needed, program materials. Saturday's lunch will be at the Student Union on campus.

Room Reservations:

*Please call to secure your overnight reservation at **Holiday Inn Washington-College Park**, 10000 Baltimore Avenue, College Park, MD. Attendees should call the 866-240-6315 and ask for group code UCT. They can also make their reservation online using www.holidayinncollegepark.com and entering Group Code UCT. We have a block of rooms on hold for \$90.00 per night double occupancy. **Reservations for the event will be made by individual call-ins. All reservations must be made by January 5 to receive this preferred rate.***

Couples may register using one form. **REGISTER BY JANUARY 5, 2010.** Return registration to UME, Kent County, 709 Morgnec Rd., Ste. 202, Chestertown, MD 21620 or email to vclrkstn@umd.edu. For further information call 410-778-1661

Grain Marketing Update Tentative February 5, 2010



A new year and new markets? This breakfast meeting will include speakers on various topics in grain marketing. Come have breakfast and discuss this year's strategies for marketing your grain. Speakers will be marketing specialists, grain elevators and traders. Cost: \$15 per person and includes breakfast and materials
Date: **TENTATIVE** -- Details and speakers are still being worked out.

**Friday, February 5th 7:30 am – 10:30 am
Easton Firehouse**

To register contact 410-822-1244

Southern Maryland Vegetable & Fruit Production Meeting February 10, 2010

*** New Location ***



Make plans to attend the **Southern Maryland Vegetable and Fruit Production Meeting on Wednesday, February 10, 2010**. This year the meeting will be held at a **New Location!**

Make plans to attend the all day event from **8:00 am to 4:00 pm** at the **Anne Arundel County Police Southern District Station** located at 35 Stepney Lane, Edgewater, MD. This meeting will provide **Private Applicator Recertification & Nutrient Management Voucher Recertification**. Speakers will provide IPM updates and present on a broad range of production topics.

Also meeting sponsors will showcase their products and services, and state vegetable organization leaders will be present to recruit and answer your questions. Please attend and make this meeting the best ever. For full conference details, contact Dave Myers, Extension Educator, Anne Arundel County Extension Office at 410 222-6759. **Please register no later than February 8, 2010. SEE ENCLOSED FLYER**

Bay Area Fruit School February 24, 2010

Attention all fruit growers! Plan to attend the **Bay Area Fruit School on February 24, 2010** at the WYE Research and Education Center in Queenstown, MD from **8:30 a.m. to 3:30 p.m.** This all day meeting will provide **Private Pesticide Applicator Recertification Credit**.

For full meeting details and registration call Debbie Dant, WYE REC at 410-827-8056, Ext. 115.

Field Crops & Pasture IPM Workshop March 22, 2010

Make plans to attend the **Field Crops & Pasture IPM Workshop, Monday, March 22, 2010** at the Davidsonville Family Recreation Center (DFRC) from **6:00 pm to 9:00 pm**. This workshop will explore advanced concepts of pasture and field crop production in the Southern Maryland region from establishment to harvest, including animal utilization. Topics will include: Crop selection; integrated crop management; soil fertility; weed control; insect control; and disease control for soybeans, corn, wheat, barley and hay crops.

Private Pesticide Applicator Recertification & Nutrient Management Voucher Recertification will be awarded for full class participation. **To register for this event contact the Anne Arundel County Extension Office at 410 222-6759.**

New Live On-Line Session Nutrient Applicator Voucher Recertification April 9, 2010



If you would like the opportunity to learn from home, yet still be engaged, then be sure to enroll in the **New On-Line Nutrient Applicator Voucher Recertification Training**, scheduled for **April 9, 2010 from 4:00 to 6:00 p.m.** This session will focus on fertility and production related topics for all field crops, fruits and vegetables. This Adobe Connect recertification session will be live via the internet directly from the University of Maryland. Adobe Connect is a student interactive system that will document your attendance. To participate in a live Adobe Connect session a high speed cable or satellite internet connection is required.

Nutrient Applicator Voucher Recertification credit will be awarded for full 2-hour session participation. **Registration by April 7th is required** in order to receive Adobe Connect login instructions. **To register for this on-line event contact the Anne Arundel County Extension Office at 410 222-6759.**

New Live On-Line Session Private Pesticide Applicator Recertification April 23, 2010

If you would like the opportunity to learn from home, yet still be engaged, then be sure to enroll in this **New On-Line Training**, scheduled for **April 23, 2010, 4:00 to 6:00 p.m.** The session will focus on pesticide use and related topics for all field crops, fruits and

vegetables. This Adobe Connect recertification session will be live via the internet directly from the University of Maryland. Adobe Connect is a student interactive system that will document your attendance. To participate in a live Adobe Connect session a high speed cable or satellite internet connection is required. **Private Pesticide Applicator Recertification credit** will be awarded for full 2-hour session participation.

Registration by April 21st is required in order to receive Adobe Connect login instructions.

To register for this on-line event contact the Anne Arundel County Extension Office at 410 222-6759.

University of Maryland Extension Pesticide Education & Safety Program New Pilot Program On-Line Farmer Course: Pesticide Applicator Pre-Exam Self Study

Course Syllabus



Course Description: This on-line self-study course will cover all thirteen chapters and appendices of the Maryland Pesticide Applicator Core Manual to fully prepare the student for successful completion of the Maryland Private Pesticide Applicators

Examination. The following core manual chapters will be covered via on-line Adobe Connect modules and PowerPoint slide series:

- Chapter 1 – Fundamentals of Pest Management
- Chapter 2 – Federal Pesticide Laws
- Chapter 3 – Pesticide Labeling
- Chapter 4 – Pesticide Formulations
- Chapter 5 – Pesticide Hazards & First Aide
- Chapter 6 – Personal Protective Equipment (PPE)
- Chapter 7 – Pesticides in the Environment
- Chapter 8 – Transportation, Storage and Security
- Chapter 9 – Emergency and Incidence Response
- Chapter 10 – Planning the Pesticide Application
- Chapter 11 – Pesticide Application Procedures
- Chapter 12 – Professional Conduct
- Chapter 13 – Maryland Applicator Law & Regulations

Textbook: Maryland Pesticide Applicator Core Manual: This text is available at your local county Extension office. Be sure to acquire this text prior to beginning the self study course.

ELMS Blackboard & Adobe Connect Modules: This course will be administered by the ELMS Blackboard student interactive system via prerecorded Adobe Connect modules and other interactive documents. ELMS Blackboard is an on-line software program which is used for resident instruction and distant learning at the University of Maryland. On-Line interactive quizzes

and examinations in ELMS Blackboard will gauge the student's progress and readiness for the state examination. The address for ELMS Blackboard is www.elms.umd.edu. To access ELMS Blackboard each student will need to have a login ID and a password assigned by the University of Maryland. Internet access to ELMS Blackboard is a course requirement.

Course Registration: Contact Dave Myers at 410 222-6759 or myersrd@umd.edu



Vegetable Crops

Update on Frost Control for Vegetables

Mike Orzolek, Penn State Horticulture
Frost is one of the high-risk elements for commercial growers, and the problem is accentuated by the fact that growers are striving to produce early and late season crops in Pennsylvania. The precautions are consequently far more elaborate and costly than those of the home garden. Frost is especially damaging to perennial fruit crops in the spring (flower parts are sensitive to freezing injury) and to tender transplants. The two weather conditions that produce freezing temperatures are rapid radiational cooling at night and introduction of a cold air mass with temperatures below freezing. Radiation frost occurs when the weather is clear and calm; air-mass freezes occur when it is overcast and windy.

Frost Control Methods

Frost-control methods involve either reduction of radiational heat loss or conservation or addition of heat. Radiational heat loss may be reduced by floating row covers. Heat may also be added from the air.

1) The use of overhead sprinklers to 'insulate' plant tissue against damaging low temperatures. Use of frost nozzles will ensure optimum water application which needs to begin on the crop as soon as the air temperature reaches 34°F. The formation of ice is accompanied by the release of large amounts of heat, which maintains plants at the freezing temperature as long as the water is being frozen. Place a calibrated thermometer at the lowest point of elevation in the field at plant level to obtain accurate temperature readings. Sprinkling should continue in the field until the air

temperature is above 30°F and the ice has melted from the plants.

2) Row covers and thermal blankets placed over vegetable crops will maintain about a 6°F temperature increase beneath the row cover compared to ambient air temperatures. For maximum frost protection use the 1.5 or 2.0 oz./sq. ft. thick row covers. Row covers/thermal blankets should be placed over the vegetables in the field in the afternoon of the anticipated frost event.

3) A weed free, moist soil helps maximize the absorption of heat during the day and the re-radiation of heat at night. This method will only protect vegetable crops to 30°F.

4) Use of a spray on materials specifically designed to protect vegetable plants after transplanting into the field whether on bare ground or plastic mulch. Several materials have come on the market over the years, but the most recent frost protecting material that is sprayed on the plants appears to have potential based on information from the company. The new material is called Ecologic™FreezePruf™ from The Liquid Fence PRO Division, Brodheadsville, PA. FreezePruf™ after application has the potential to protect vegetable plants (foliage, flowers and fruit) up to 9.4°F below their normal frost/freezing damage and mortality temperatures. When it was evaluated at Penn State, it did not eliminate frost/freezing damage with temperatures of 22°F; however, growers may wish to try it on a trial basis because it could provide protection with higher temperatures. Foliar application is made with complete coverage of the foliage with FreezePruf™ prior to a frost event with a 1:4 dilution – FreezePruf™ concentrate to water. Protection may last up to 6 weeks before re-application is required. FreezePruf™ is biodegradable with no REI requirement. FreezePruf™ enhances the plant's mechanism for cold tolerance by preventing water in tissues from freezing at temperatures at or modestly below freezing and increases the tolerance to tissue ice when it gets so cold that ice does form in plant tissue. This product application is most effective for reducing spring and fall frost damage on both young and mature vegetable crops.



Agronomic Crops

The Agronomy Facts Number 54, the **Maryland Corn Hybrid Performance Test Report**, has been posted to the Cropping Systems website: www.mdcrops.umd.edu



Soil Management and Environment Website Launched by Extension

By Mahdi Al-Kaisi, Associate Professor, Agronomy Dept.

Iowa State University Extension soil management and environment information can now be found on a new website www.agronext.iastate.edu/smse. The Soil Management/Environment website replaces the Soil Management and Conservation Practices website. It contains information that is useful to producers, agriculture business, and scientists.

Website content is based on past and current extension and research projects on tillage and cropping systems, soil carbon, residue management, and cover crops. ISU Extension publications, newsletter articles, refereed journal articles, and relevant links are listed under each area of interest. Descriptions of the most current projects are also included.

Several management tools are available, including residue and erosion calculators and other decision-making tools. The materials on this website are intended for public use and educational and research purposes with proper credit to the authors and Iowa State University Agronomy Extension. We welcome any feedback on the new format so continued improvements to the dissemination of our extension and research programs to the agricultural community in Iowa and elsewhere can be made.

Mahdi Al-Kaisi is an associate professor in agronomy with research and extension responsibilities in soil management and environmental soil science. He can be reached at malkaisi@iastate.edu or (515) 294-8304.

This article was published originally on 11/16/2009. The information contained within the article may or may not be up to date depending on when you are accessing the information.

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*University of Maryland
MD Department of Agriculture
University of Delaware
Virginia Polytechnic Institute*

To subscribe to Pest Net: Send an email to listserv@listserv.umd.edu. The body of the email should contain the line: subscribe pestnet-information 'your name' Replace 'your name' with the appropriate information and send the message from the email address to which you want the information sent.

To unsubscribe to Pest Net: send an email to listserv@listserv.umd.edu the body of the email should contain only: 'unsubscribe pestnet-information.' If you have any difficulty subscribing or unsubscribing to the list, please send email to alwilson@umd.edu. For more information, contact [Sandra Sardanelli](mailto:Sandra.Sardanelli@umd.edu), ssardane@umd.edu

Pest Net On-Line Resources

University of Maryland Pest Management Updates

[PestNet Reports](#)

[PestNet Report XML](#)

[Vegetable Disease Forecasting - MCE](#)

[MDA Plant Pest Survey & Detection](#)

MCE TPM/IPM Weekly Reports

[Greenhouse Updates](#)

[Landscape & Nursery Updates](#)

University of Delaware Weekly Crop Update

[Current & Past Issues](#)

[DE Insect Trap Counts](#)

Virginia AG Pest Advisories - VPI Info

[Current & Past Issues](#)

Other Resources

[Mid-Atlantic Regional Fruit Loop](#)

[Penn State Pest Watch](#)

[Pesticide Education & Assessment Program](#)

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NEW WEB-BASED MODULES for Integrated Pest Management (IPM) training available

<http://www.cce.umn.edu/Integrated-Pest-Management-Education/>

IPM3, a consortium of federal agencies and land-grant institutions dedicated to the efficient and timely delivery of practical integrated pest information to people responsible for developing and implementing Integrated Pest Management (IPM).

IPM3 provides a Web-based, distance delivery opportunity for individuals interested in IPM to become proficient in the principles and application of IPM as taught by leading IPM authorities in diverse disciplines from various United States universities. Most of the individuals who seek our IPM training are not academics but need practical information so they can implement IPM in their day-to-day pest management decisions.

Target audiences include but are not limited to employees of federal agencies such as the National Park Service, the Fish and Wildlife Service, the General Services Administration, the Forest Service, the Bureau of Land Management, and the Environmental Protection Service. Additional audiences include: state/local government officials tasked with IPM, Extension educators, master gardeners, 4-H staff, crop consultants, pest management professionals, and a wide array of green industry professionals.

Seasonal, Pandemic and 2009 H1N1 Influenza

October 24, 2009 -- President Obama has declared 2009 H1N1 a [national emergency](#) making it easier for U.S. medical facilities to handle a surge in flu patients by allowing the waiver of some requirements of Medicare, Medicaid and other federal health insurance programs. This declaration follows the announcement Friday by the Centers for Disease Control (CDC) that 2009 H1N1 is widespread in 46 of the 50 U.S. states, a level comparable to the peak of ordinary flu seasons but far earlier and with more waves of infection expected.

In the United States, winter is the traditional time for seasonal influenza. Flu outbreaks can happen as early as October, however most of the time influenza activity peaks in January or later. In 2009, the flu season did not end, but continued with the outbreak and worldwide spread of 2009 H1N1. This new virus was first detected in Mexico and then in the United States, April 2009. June 2009, the World Health Organization (WHO) [declared 2009 H1N1 a pandemic](#) and warned to expect a second wave of the virus, fall 2009.

Seasonal influenza is a respiratory illness that can be transmitted from person to person. Most people have some immunity to seasonal flu and typically seasonal flu vaccine is available for populations at risk and the general public. Each year in the United States, more than 200,000 people are hospitalized due to seasonal flu an estimated 36,000 people die from flu-related complications.

Pandemic influenza is a global outbreak of disease that occurs when a new influenza A virus appears in the human population, causing serious human illness and spreading easily from person-to-person worldwide. Because people have little or no immunity protection from such a new virus, there can be high levels of illness, death, social disruption, and economic loss. There have been on average, three pandemics every 100 years and they can occur years apart or back-to-back. The last major influenza pandemic occurred in 1918 (known as the [Spanish Flu](#)) and killed as many as 50 million people worldwide, including more than 500,000 in the United States. This is not the only pandemic influenza to occur in the US in the past 100 years. For details of the 1957-1958 and 1968-1969 pandemics see the [Center for Infectious Diseases, Research & Policy](#) (CIDRAP).

2009 H1N1 (referred to as "swine flu" early on) is a new influenza virus causing illness in people worldwide. This new virus was first diagnosed in people in the United States, April 2009. On June 11, 2009, the World Health Organization (WHO) signaled that a pandemic of 2009 H1N1 flu was occurring and elevated the Pandemic Alert to Phase 6. This designation was a signal to the world to plan and prepare.

August 2009, the 2009 H1N1 influenza virus is the predominate influenza virus in circulation worldwide. The epidemiology (study of factors affecting the health and illness of populations) of the disease caused by the 2009 H1N1 influenza virus currently circulating in the Southern Hemisphere is very similar to that seen in the United States earlier this year. According to CDC and WHO, the current virus circulating looks similar to A/California/07/2009 (the reference virus selected by WHO as a potential candidate for the new 2009 H1N1 vaccine).

August 30, 2009 marked the beginning of the 2009-2010 influenza season as of that date CDC began providing [aggregate reports](#) of all influenza and pneumonia-associated hospitalizations and deaths, including 2009 H1N1 and seasonal flu. The official influenza season began October 4, 2009. November 12, 2009 the CDC released revised estimates of 2009 H1N1 influenza cases, hospitalizations and deaths in the US April through October 17 of this year. The revised estimates indicate about 22 million people have had 2009 H1N1; there have been 98,000 hospitalizations and 3,900 deaths 540 of the deaths in children. For more information on

how these estimates were derived see -- [CDC flu estimates](#).

2009 H1N1 vaccine shipment and distribution has begun in the United States, with first doses of vaccine being given to first responders, with priority high risk groups to follow. As vaccine supply has increased, 6 months of age and under 24 years old. It remains only those over 24 and under 64 with chronic health conditions should receive the vaccine. To track supply and distribution for your state, check, [CDC 2009 H1N1 Vaccine Supply page](#).

As H1N1 has spread, in recent weeks there has been concern about the growing number of cases and deaths in the Ukraine, which has led to speculation the virus may have mutated. WHO released a good news [statement](#) that in fact preliminary tests indicate there have been no significant changes in the virus. Mutations to the virus have been detected in other countries including most recently Norway. [WHO reports](#) scientists are tracking the changes and thus far there is no indication the virus has become more virulent.

There has also been recent reports on identification of H1N1 anti-viral resistant clusters in the UK and US. [CIDRAP reports](#) in both instances the patients were severely ill added to the mutation ability of influenza viruses, this finding did not surprise the medical professionals, but surveillance continues on this front.

Good Health Habits Can Help Stop the Spread of the Virus

The Centers for Disease Control recommends the following to help reduce the spread of seasonal or pandemic influenza:

- **Avoid close contact.** Avoid close contact with people who are sick. When you are sick, keep your distance from others to protect them from getting sick too. Remain at home for 7 days after your symptoms begin or until you have been symptom-free (no fever) for 24 hours, whichever is longer
- **Stay home when you are sick.** If possible, [stay home](#) from work, school, and errands when you are sick. You will help prevent others from catching your illness.
- **Cover your mouth and nose.** Cover your mouth and nose with a tissue when coughing or sneezing. It may prevent those around you from getting sick.
- **Clean your hands.** [Washing your hands](#) often will help protect you from germs. Avoid touching your eyes, nose or mouth. Germs are often spread when a person touches something that is contaminated with germs and then touches his or her eyes, nose, or mouth.
- **Practice other good health habits.** Get plenty of sleep, be physically active, manage your stress, drink plenty of fluids, and eat nutritious food.

The United States Department of Health and Human Services has an excellent series of webcasts, [Know What to do About the Flu](#) with information for parents, care givers, employers, schools and other community organizations and groups.

The US Department of Health and Human Services released a 2009 H1N1 [self-flu evaluator](#) to help individuals determine their flu status. CDC has published [guidelines for self-care or care for a family member with 2009 H1N1 as well as information when to seek emergency medical treatment](#).

Pandemic Influenza 2009 H1N1, as any disaster has the potential to create a myriad of mental health issues for children, adults and first responders. Fear and anxiety about the disease, caring for sick children or family members, death of a loved one or friend, loss of wages, no health insurance are just a few examples of what may lead to disaster mental health issues. Many communities have as part of their disaster preparedness plan have trained first responders in disaster mental health counseling, thus check in your area. CDC has some excellent resources to help individuals and families cope with a disaster: [Advice for Parents Talking to Their Children about H1N1 Coping with Disaster or Traumatic Event](#) As well there is an excellent EDEN Topic page -- [Children and Disasters](#)

Novel 2009 and Pets

In addition, all types of birds and several non-ruminant mammals (dogs, ferrets, pigs, and horses) are susceptible to influenza viruses. Cases of 2009 H1N1 influenza virus infection "spilling over" into these animals may occur if they come into close contact with an H1N1-infected human. On October 9, 2009, an USDA laboratory confirmed 2009 H1N1 infection in a ferret. The ferret's owner had previously been ill. November 4, 2009 another case of 2009 H1N1 was confirmed in a pet ferret in Nebraska. Also reported the same day by the [Iowa State Department of Health](#) was a confirmed case of 2009 H1N1 in a domestic (indoor) cat. In both of these cases the owners has been ill.

The best advice is to always follow common sense guidelines when dealing with animals (e.g., washing your hands). In addition, it's more important than ever that pet owners keep a good eye on their pet's health and consult a veterinarian if their pet is showing any signs of illness. Keeping your pets healthy reduces their risk of becoming ill. Companion animals including pot-bellied pigs, and birds should be monitored closely for signs of flu-like illness. Just like in people, treatment by your veterinarian will include efforts to treat the symptoms and/or prevent secondary bacterial pneumonia. It is unknown at this time whether an infected pet will harbor enough virus to spread the infection to a cage mate or uninfected humans. See the American Veterinary Association [FAQs](#) for more

information or the [CDC 2009 H1N1 and companion animals](#).

Individual, Family, School, Business, Child Care Facility, Faith-Based Organization and Community Planning and Preparation

As we have seen, pandemic influenza is not a local, state or regional disaster. For this reason, communities, states and nations will stand alone to respond and recover. August 2009, Secretary of Health and Human Services Kathleen Sebelius warned that in anticipation of the second wave of 2009 H1N1, preparedness starts with individuals and families. Pandemic influenza is not a short duration disaster such as a tornado or hurricane. The scope, duration and likely disruption of commerce and daily life as we know it, demands individuals and communities be prepared to take care of themselves for two to six weeks. While a 72-hour kit emergency kit may work well for some disasters it likely will not be sufficient for pandemic influenza. There are many excellent resources to help [individuals, families, schools, businesses, child care facilities, and faith-based/volunteer and community organizations](#) plan and prepare for pandemic influenza. Please refer to the following resources:

- [United States Department of Health and Human Services](#) and [CDC](#)
Information for K-12 schools, colleges and universities, child care facilities, business/employers and faith-based/volunteer organizations
- **United States Department of Homeland Security** -- [Ready America](#)
Get a kit, Make a Plan, Be Informed and Get Involved (4 steps to prepare)
- **EDEN online learning opportunities:**
 - [Pandemic Preparedness for Business](#)
 - [Pandemic Preparedness for Faith-Based Organizations](#)

Individual and family planning and preparation is essential in any community for two reasons: 1) first responders must be ready at home to be able to respond in the community, and 2) the better prepared citizens are in a community the less stress on responders and demand for limited resources. However, for many, the task of making a pandemic plan is overwhelming, but that need not be the case. There are four steps for being prepared:

1. Get a Kit. This means putting together food, water, medicine and supplies for yourself and your family for a period of two weeks, though for pandemic planning purposes, six weeks would be better. The biggest challenge for many is determining how much food and water is needed for two weeks or longer. [Breadykit Wizard](#) is an online resource to help you build your kit

based on the size of your family and the age of your family members. The kit will also determine pet supplies needed. Breadykit Wizard will develop a purchase plan to help you build your kit over time.

2. **Make a Plan.** Every individual and family needs a communication plan for a disaster, pandemic or otherwise, and [Ready America, Make a Plan](#) is an easy-to-use online resource for developing a communication plan. A communication plan must have contact information for all family members, including school, child care facilities, and medical information for each family member. Individuals and families must have a plan for sheltering in place or evacuating.

3. **Be Informed.** Individuals and families must be aware of the types of disasters, natural and man-made, likely to occur in their area and plan accordingly. For instance, while flooding or wildfires may require evacuation, blizzards and pandemic influenza will require sheltering in place. To learn more about disasters for your area go to [Ready America - Be Informed](#).

4. **Get Involved.** Don't delay, learn today what your community has done or is doing to plan and prepare for pandemic influenza. The U.S. pandemic influenza plan and individual state plans may be found at [Pandemic.gov](#).

EDEN Institution Pages on Pandemic Preparedness

- [New Mexico State University](#)
- [North Carolina State University Disaster Information Center](#)
- [South Dakota State University](#)
- [Texas A&M University EDEN](#)
- [Utah State University](#)

Potential Impact of the Second Wave of 2009 H1N1

The severity and extent of the second wave of 2009 H1N1 in the United States and the world cannot be fully predicted. In Mexico, during the first wave, daily life and business was disrupted and in the United States schools were closed for up to three weeks. Here is what we have seen thus far and may expect with the second and subsequent waves of 2009 H1N1:

1. **Rapid spread.** The virus spread worldwide from the initial outbreaks in Mexico and the United States, to Europe and Asia to the southern hemisphere and now back to the northern hemisphere. Countries may close borders and/or restrict travel but these efforts may only delay not stop the spread of the virus.
2. **Health care system overload.** Most people have little or no immunity to novel a pandemic virus, as we have seen with 2009 H1N1. Many people have become ill and required some form of medical care. In the second wave, many countries will not

have the staff, facilities, equipment, and hospital beds needed to cope with large numbers of people who suddenly fall ill, as was seen in Mexico. In some parts of the United States medical surge capacity is being exceeded, which is one of the reasons President Obama declared 2009 H1N1 a national emergency. This declaration should allow for more rapid treatment and expanded treatment facilities with less paperwork. The death rate from pandemic influenza is determined by four factors: (1) the number of people who become infected, (2) the virulence of the virus, (3) the underlying characteristics and vulnerability of affected populations and (4) the effectiveness of preventive measures. Thus far, epidemiological data indicate pregnant women, children/young adults, severely obese and immune compromised are the at risk populations for novel H1N1.

3. **Medical supplies will not be adequate.** The initial demand for vaccine is exceeding supply. Worldwide, there may be a shortage of antiviral medications, though the United States, in preparing for pandemic influenza, has been stockpiling antiviral for several years.
4. **Economic and social disruption.** As seen in Mexico, pandemic influenza can cause economic and social disruption due to travel bans, closings of schools and businesses, and cancellations of events. Tourism, entertainment, restaurants, and sporting events will suffer severe economic loss. It is estimated, 30-40% illness with the second wave and thus this rate of illness combined with caring for sick family members and fear of exposure to the virus may result in significant worker absenteeism and possibly loss of a business and/or employment. August 2009, the federal government released [leave guidelines](#) for employers in anticipation of the second wave of 2009 H1N1.



Grain Marketing Highlights

Carl German, Extension Crops Marketing Specialist; clgerman@udel.edu

Pre-Thanksgiving Holiday Grain Marketing Brief

As the commodity markets continue to seek direction they are being helped by outside market forces; strength in the Dow Jones Industrial Average (10,456.99), strength in gold, weakness in the dollar index (74.675), etc. However, it is the anticipated direction of commodity prices that becomes the driving force in making marketing decisions. With the U.S. corn harvest nearly 70 percent complete and quality problems (vomitoxin and diplodia) not as severe as originally thought, the U.S. corn harvest will be winding down soon. U.S. corn supplies are ample, which is likely to result in the corn market retesting previous lows in the near term. Every day market

analysts pound the idea that the carry in the corn market suggests that storing '09 corn should pay. However, the strong carry and more than adequate supply also indicates that the corn market could now be in for a sharp sell-off. The looming sell-off highly suggests that stored corn needs to be price-risk protected. Price protection can be achieved by selling forward via the cash market, using the options market, or selling a futures contract. The idea is to get the carry the market is offering locked in and protected before it slips away. The important point to remember is that storing long cash corn could turn out to be ill advised.

The lack of carry in the soybean market suggests that near term price strength can be expected, at least until more is known concerning the South American crop. The window of opportunity for selling the 2009 soybean crop would appear to be between now and the end of January. The current spread in soybean futures contracts indicates that once the Southern Hemisphere crop begins harvest one can expect downward pressure on soybean prices. Strong demand for U.S. soybeans has supported this market through harvest up to the present time. However, the magnitude of that strength and the direction of soybean prices could change once the Southern Hemisphere crop begins to materialize. It is likely to be a good idea to get 2009 soybean sales on the books by the first of the year. At the same time, a case can be made for getting 30 to 50 percent of anticipated 2010 soybean production priced, also by the first of the year.

The wheat market is interesting. Domestically, we know that the stocks-to-use ratio for all wheat in the '09/'10 marketing year is 42 percent, while world stocks-to-use are currently at 29 percent. U.S. wheat exports are also running behind USDA downward projections of 875 million bushels, suggesting that U.S. wheat is overpriced for the world market. We also know that Dec '10 (old crop) and July '10 SRW wheat prices have rallied about \$1.00 per bushel since October 5th due to in large part to speculative investment interest. In fact, other than speculative interests, there doesn't appear to be any bright spots for wheat prices at the present time. The only factor not known at this time is to what extent were farmers not able to get all of the SRW wheat crop planted due to a slow harvest season and wet weather? Undoubtedly, some of the wheat that was planted may not emerge to produce a sufficient stand due to cold, wet soils. Those plantings may become abandoned wheat acres this spring, switching to corn or soybeans. Therefore, booking a 10 percent sale of anticipated production for new crop wheat would seem advisable at this time.

In summary, current market indicators suggest taking price protection on stored corn; selling '09 harvested soybeans in the cash market and booking sales for 30 to 50 percent of anticipated 2010 soybean

production; and booking an initial sale of '10 new crop wheat. Currently, July '10 corn futures are trading at \$4.19; Dec '10 corn futures at \$4.35; Jan '10 soybean futures at \$10.35; Nov '10 soybean futures at \$10.30; Dec '09 SRW wheat futures at \$5.38; and July '10 SRW wheat futures at \$5.86 per bushel.

Grain Marketing Discussion Group December Supply/Demand Report Highlights

The release of USDA's December supply and demand report did not contain any surprises for the commodity markets. As expected, 09/10 U.S. corn and wheat ending stocks were increased while soybean stock estimates were decreased from last month. The December report did not include updates to USDA's crop production estimates for corn, soybeans, or wheat. The annual crop production report which will include final acreage, yield and production tabulations for the '09/'10 crop year will be released on January 10th.

Corn Analysis

The harvest delayed U.S. corn crop is now approximately 88 percent complete according to Monday's crop progress report. December's supply and demand estimates, released this morning, recorded only one change from last month. The '09/'10 marketing year estimate for corn exports was reduced by 50 million bushels from last month, now projected at 2.050 billion bushels. The net impact was an increase of 50 million bushels in ending stocks for U.S. corn, now placed at 1.675 billion bushels.

The estimate for the season average farm price was left unchanged at \$3.25 to \$3.85 per bushel.

World ending stocks for corn were reduced slightly from last month, now estimated at 132.34 million metric tons compared to 132.41 last month and 145.44 last year.

Soybean Analysis

The estimate for U.S. Soybean exports was increased by 15 million bushels from the November forecast, now placed at 1.340 billion bushels. This change resulted in a 15 million bushel decrease in the estimate for U.S. ending stocks, now forecast at 255 million bushels.

The estimate for the season average farm price increased 55 cents per bushel on the low end and by 5 cents per bushel on the high end of the price range, now estimated at \$8.75 to \$10.25 per bushel.

The estimate for Southern Hemisphere (Brazil and Argentina) soybean production was left unchanged from last month's 116 MMT, as compared to 89 MMT last year.

World ending stocks for soybeans were reduced slightly from last month. World ending soybean stocks were estimated at 57.09 million metric tons, as compared to 57.39 MMT a month ago and 42.41 MMT a year ago.

Wheat Analysis

Food use for U.S. wheat was reduced 15 million bushels from last month, now estimated at 940 million bushels. This change resulted in a 15 million bushel increase in U.S. ending stocks for all wheat, now estimated at 900 million bushels. Ending stocks for all U.S. wheat are now projected to be 1/3 larger than last year's 657 million bushels ('08/'09 marketing year) and 3 times larger than the '07/'08 marketing year (306 million bushels) .

The season average farm price estimate, ranging from \$4.65 to \$5.05 per bushel, was left unchanged from last month.

The world wheat ending stock estimate was increased from last month's 188.28 million metric tons, now projected at 190.91 MMT.

Marketing Strategy

Strategically, nothing has changed since last month. The commodities markets continue to be driven by outside market forces. The corn and wheat markets are still depicting very strong carry. Duly noted, 10 percent (+) of the nation's corn crop is still in the field which should be supportive to nearby corn prices. New crop 2010 soybean prices are still expected to slacken toward mid-to-the end of January, possibly reversing direction. A huge production increase is expected for the Southern Hemisphere soybean crop which is expected to increase world stocks that will be carried into the '10/'11 marketing year. The U.S. dollar index (value of the dollar) which was in a steady decline over the past six months has shown some signs of strengthening over the past couple of weeks. A stronger dollar could weaken commodity prices if exports slacken as a result. More needs to be known regarding the completion of this year's corn harvest and about growing conditions in the Southern Hemisphere before advancing sales decisions. Currently Dec '09 corn futures are trading at \$3.77; Mar '10 corn futures at \$3.92; Jan '10 soybean futures at \$10.29; and July '10 SRW wheat at \$5.56 per bushel.

For **technical assistance** on making grain marketing decisions contact:

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Phone: 302-831-1317 Fax: 302-831-6243

List Owner: **E-Grain Marketing Club** grn-mktdg@udel.edu;

Farmer's Grain Marketing Decision Aid

www.webixi.com/grainguide and

Farm Fresh Retail/Wholesale Marketing Web

Site www.agriculturehealth.com.



Forest Stewardship Education
www.naturalresources.umd.edu

The fall issue of Branching Out is now available at:
www.naturalresources.umd.edu/Publications/BranchingOut/20094Fall.html

NEW! Branching Out has a new look and is now available in html format. The new format makes Branching Out more interactive with the internet. If you experience any problems viewing or printing the newsletter, please notify us. A printer-friendly version is also provided.

Branching Out is a forest stewardship quarterly newsletter published by the University of Maryland Extension and provides current information to private woodland owners, natural resource professionals and to the public. We encourage you to share this free newsletter with others and invite them to subscribe by visiting:

www.naturalresources.umd.edu/Publications/BranchingOut/About.html

For further information or questions you may contact: Ellen Green, Forestry Extension Assistant, University of MD Extension, 301-432-2767 x307
egreen13@umd.edu, www.naturalresources.umd.edu

Forests on the Rise! Changing Forests Series: Adapting to the Smaller Woodlot

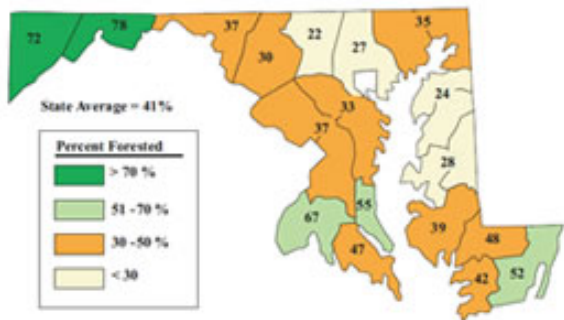
Jonathan Kays, Extension Specialist, Natural Resources,
University of Maryland Extension

Previous articles in *Branching Out* have shown that the Maryland landscape has become more fragmented (smaller woodland areas), and more parcelized (smaller ownerships), over the past decades. But what about the distribution and composition of woodland on wildlife habitat and populations? This article will investigate these issues.

Woodland cover in Maryland has declined steadily since the 1960s when 47% of the state was woodland, to the present day where 41% or 2.6 million acres is forested. Given the rapid population increases in Maryland, this is a significant percentage of land still in forest. Some of the reasons forests are still widespread is that much of the population increase has been concentrated around the Baltimore/Washington D.C. area, leaving much of the state fairly rural. Another reason is that the sizable loss of farmland to development has meant that some of that land

reverted to forest cover. The focus of conservation programs on protecting forests has also been a factor.

PERCENTAGE OF LAND IN FOREST, BY COUNTY, 1999



Values on county boundaries denote an average for the two counties.

Figure 1 (Please click on image for larger view.)

The average amount of forest across the state is 41%, but it is not evenly distributed (Figure 1). Allegany and Garrett counties are the most heavily forested counties (78% and 72%), and Kent and Queen Anne's are the least forested, together averaging 24%. Heavily forested areas are also found in southern Maryland and the lower Eastern Shore. The forest industry is more concentrated in those areas because a greater amount of the resource is closer at hand.

Maturing Forests and Wildlife

Succession of Habitat

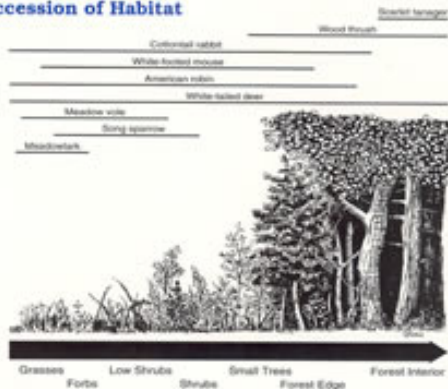


Figure 2 (Please click on image for larger view.)

Most people think the more mature the forest the better because it provides better habitat for wildlife species. There are a number of wildlife species that benefit from mature forest habitat but there are many other wildlife species that will only live in younger forests, known as early successional forests. All forests start with bare ground, typically an abandoned farm field. The grasses grow first and then small shrubs and trees are brought in by birds, wind, and animals (Figure 2). Over time the trees mature and a forest develops. The key principle to understand is

that different types of wildlife require different habitat. Some wildlife species require mature forest habitat, some require younger forest, and some require a mix. Turkeys are a good example. Older turkeys require mature forest to roost and find acorns and other food, but fields are needed for the young birds (called "poults") to forage for insects in the spring. The size of the forest is also important. There is a great deal of concern about forest interior dwelling species of birds that require large areas of unbroken mature forest. However, many people are unaware of the group of wildlife species that require young forest or old field to thrive. The problem is that Maryland's forests are maturing, resulting in fewer stands of young trees and the habitat they provide. The U.S. Forest Service does periodic inventories of Maryland forest to determine the percentage of forest that is of saw timber size (greater than 12 inches in diameter), pole timber size (5-11 inches in diameter), and sapling and seedling size (less than 5 inches in diameter).

In 1976, 20% of Maryland forest was in young forest (seedling/sapling), but that declined to 12% in 1999 (Figure 3). Likewise, mature forest (saw timber) has increased from 55% of the forest land to 67%. The reason for the continuous maturing of the forest is the recovery from widespread harvesting in the early 1900s and the regrowth of land after agricultural abandonment in the 1930's and 1950's. In addition, increasing emphasis on nature conservation and protection has resulted in new policies and trends to save trees and forests.

TIMBERLAND AREA BY STAND-SIZE CLASS AND PERCENT OF TOTAL BY INVENTORY YEAR

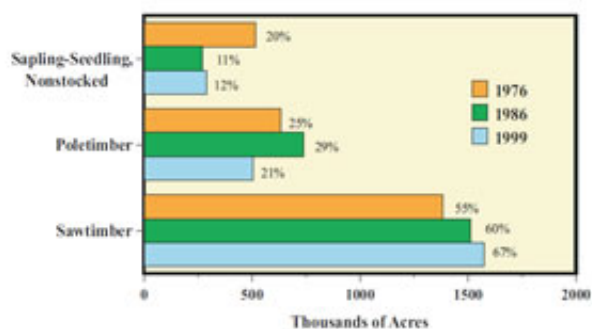


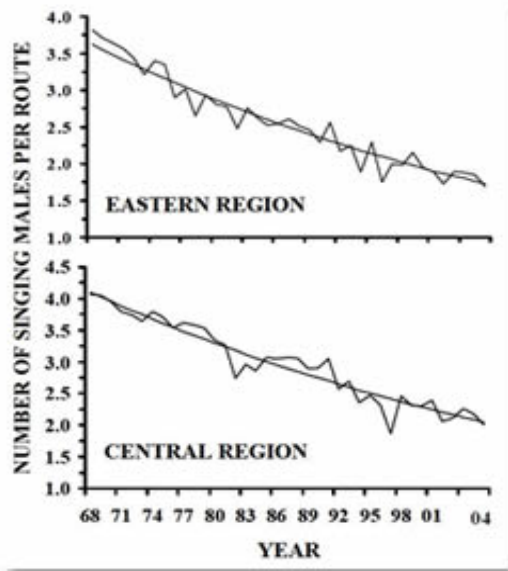
Figure 3 (Please click on image for larger view.)

Wildlife that relies on young forest and fields has suffered as a result. They include species such as bobwhite quail, woodcock, eastern loggerhead shrike, and common yellowthroat, as well as other mammals and invertebrates.

One tool to assess the population abundance of early successional bird species is the singing-ground survey, which was developed to exploit the conspicuous courtship display of the male woodcock. Woodcock is a species that relies on early

successional habitat to thrive. Early studies demonstrated that counts of singing males provide an indicator of woodcock populations and could be used to monitor annual changes. Figure 4 shows that the number of singing males per route has declined dramatically since 1968 and continues through 2004, a trend that continues to this day. The dramatic declines are attributed to the maturing of forests, and the lack of management that creates a balance of early succession forests through forest harvesting and maintaining old field areas. The result is that woodcock populations suffer and the overall diversity of wildlife is diminished.

Figure 4 (Please click on image for larger view.)



Many private forest owners value mature forests for their wildlife, recreation, economic, and spiritual value. However, diversity of habitat for wildlife is important and requires regular management to create or sustain early succession habitat for wildlife. By working with a natural resource professional, forest landowners can use forest management techniques to enhance habitat. For example, creating a small clearing in the woods or killing the trees that are invading an old field.

Volume, Composition, and Growth of Forests

Maryland's forests contain a rich mix of species. The forest inventory in 1999 identified 94 species, though many are uncommon. The 12 most common species and species groups make up 88% of the total forest volume. Yellow poplar has the highest volume of all the species, followed closely by red maple. However, there are wide regional differences depending upon where you live.

The composition of our forests continues to change. The combined oak species represent 28% of the total volume of wood in our forests but that is down from 45% in 1950. Meanwhile, red maple has increased from 8 to 13%. The decrease in the

proportion of oaks has been attributed to many factors, including the high mortality of oak species following gypsy moth infestations, loss of oak reproduction due to deer browsing, and selective harvests that favor oak species for their value.

During the last 50 years in Maryland, the growth of trees has outpaced removals by a wide margin. The surplus of growth has meant an annual net increase of 0.2% in the volume of wood. However, there are some differences between species. The growth of yellow poplar is 4.5 times faster than it is being removed, either due to harvesting or land use changes, while the growth of loblolly pine has just kept pace with removals. The removal of wood from our forests is attributed largely to harvesting and land use changes.

Forest Health Concerns

Monitoring forest health through specific measures is a developing science. One thing we do know is there are imminent threats to our forest such as the emerald ash borer (EAB) and overabundant deer populations. EAB has the potential to kill all ash trees and despite quarantined areas issued by the Department of Agriculture in southern Maryland, EAB continues to spread throughout the state. This is in addition to other sightings found just outside the state borders in West Virginia and Pennsylvania. Deer continue to have a detrimental impact on forest regeneration and ecology.

If you own woodland, it is worthwhile to contact a professional forester to develop a forest stewardship plan for your forest to deal with inevitable changes that will occur. As the forest matures, wildlife habitat is impacted and depending upon your objectives, management practices can be implemented to improve habitat for a diversity of species.

USDA Forest Service, Northeastern Research Station. [Trends in Maryland's Forests](#) (NE-INF-152-02)

Kelley, J.R., Jr., and R.D. Rau. 2006. *American woodcock population status, 2006*. U.S. Fish and Wildlife Service, Laurel, Maryland. Available at: http://library.fws.gov/Bird_Publications/Am_woodcock_population06.pdf

Picone, P. M. Connecticut Dept. of Environmental Protection Wildlife Division. *Enhancing Your Backyard Habitat for Wildlife*. Available at: www.ctdepstore.com.

Smokey Turns 65 – Happy Birthday Smokey!



Visit <http://www.smokeybear.com> to help Smokey celebrate his 65th birthday! And, learn how to prevent wildfires.



Extension Unveils New Name and Logo to Better Reflect Mission and University Ties

What's in a name? Despite Shakespeare's assertion that "a rose by any other name would smell as sweet," an organization's name can mean a great deal in terms of its identity, marketing efforts, and ability to thrive.



There's no doubt that the University of Maryland (UM) is a well-recognized name, or "brand." And in an effort to strengthen public recognition of its university affiliation, the organization formerly known as Maryland Cooperative Extension has been renamed the University of Maryland Extension (UME). "Extension programs are based in the College of Agriculture and Natural Resources (AGNR) at the University of Maryland, College Park, and at the University of Maryland Eastern Shore and are delivered to state residents in every county and Baltimore City," says Dr. Nick Place, associate dean and associate director of UME. "Our new name formally recognizes this connection and Extension's role as the outreach vehicle of university research and teaching throughout both campuses, the University of Maryland System's many institutions, and across the entire state."

With the new name comes a new look, including the logo featured at the top of this page. But don't worry; we haven't changed our focus: you. If anything, says Dr. Place, we're working to keep UME even more responsive to the needs of the community, economy, and environment by focusing on four impact areas:

- local food and agricultural systems,

- environment and natural resources,
- healthy living, and
- Resilient communities.

Unbiased, research-based programs related to these impact areas are available through offices in the city of Baltimore and all 23 Maryland counties. The traditional Extension programs of 4-H Youth Development, Family and Consumer Sciences, Sea Grant Extension, Agriculture, Home Horticulture, and Natural Resources will serve as keystones in this client needs-focused effort.



The Fall 2009 issue of *Wild & Woolly*, the Maryland Sheep & Goat Producer Quarterly Newsletter has been published to the web at:

<http://www.sheepandgoat.com/news/index.html>.

Susan Schoenian, Sheep & Goat Specialist
University of Maryland Extension, sschoen@umd.edu

Balance Sheep Rations Online

Montana State University's Sheep Ration Program (www.msusheeppration.montana.edu) is designed to assist producers in matching available feedstuffs with the animal's nutritional needs. With the program, you can:

- View sheep nutritional requirements
- View the standard nutrient content of more than 300 feeds
- Enter custom feed values based on laboratory results
- Balance a ration for sheep at various life cycle stages
- Find answers to frequently asked nutritional questions.

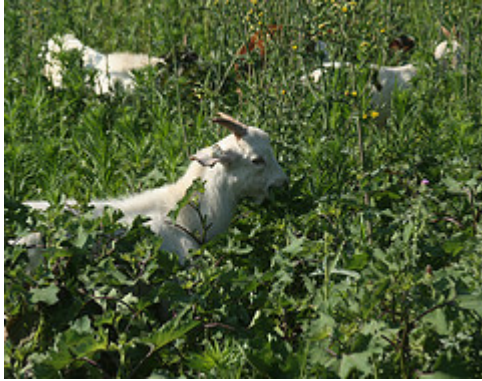
MSU Feed Ration is a free on-line program that does not require any specific type of software. To use the program all you need is a computer capable of accessing the Internet.

The program is based in part on nutritional recommendations adapted from "Nutrient Requirements of Sheep," Sixth Revised Edition, 1985, by the National Research Council.

Goat rations can be balanced online using Langston University's nutrient requirement calculators at http://www.luresext.edu/goats/research/nutr_calc.htm

Weed or Feed?

[Jeff Semler](#), Extension Educator,
Agriculture & Natural Resources
University of MD Extension-Washington County



As you know a plant can be the apple of one person's eye and the bane of another. One needs to remember that a weed is simply a plant out of place. When it comes to livestock producers, whether a plant is a weed will depend on what type of animal the producer is raising.

To a dairy farmer, fescue can be a weed, but to a beef producer it is high quality winter feed. When it comes to small ruminants such as sheep and goats the weed designation gets even more unclear.

However, if you ask the average farmer if they consider marehail, chicory, lambsquarter and foxtail weeds, the almost unanimous response would be yes. The possible exception would be if you had a goat producer in the group.

Currently at the Western Maryland Research and Education Center, there are 60 goats which are part of the [Western Maryland Pasture-based Meat Goat Performance Test](#). These bucks belong to seventeen different consignors and hail from twelve states.

The goats are maintained in a ten acre pasture consisting of five paddocks. The paddocks contain some of the usual suspects such as orchardgrass and fescue but two paddocks are planted in unusual species. One paddock contains two annual forages: turnips and pearl millet.

The other paddock was seeded to perennial forage chicory three years ago. Finally, there is a paddock that was seeded to sericea lespedeza this spring and was a complete failure but that is where things get interesting.

Since this behavior, which was not totally unexpected since goats are really browsers and not grazers, piqued my interest I took some forage samples of these perceived weeds and had them analyzed. I didn't have the thistles tested but I will get back to that later.

Below is the analysis of these forages. As you can see these "weeds" are of higher quality than most of the hay that is fed to our test bucks herd mates during the winter. As a matter of fact the chicory tests higher than alfalfa hay which would be the envy of every dairy farmer.

Table 1: Forage analysis			
Plant	% protein	% TDN	Relative feed value
Mixed	14.1	65.8	111
Chicory	14.3	75.3	184
Lambsquarter	23.2	89.6	289

Why didn't I take a sample of the thistles? The goats beat me to them. In the chicory field there is a rock outcropping that was rife with thistles. When the goats were turned into that paddock they ate the thistles first. This I believe had more to do with behavior than with nutrition.

The rock outcroppings are the high ground in the paddock and this was the preferred position for the goats to set up camp. Below you can see the before and after pictures of the rock outcroppings.



Before



After



Open Enrollment for the Spring 2010 Semester of the General Forestry Course Begins January 4

The University of Maryland Extension will offer the General Forestry Course for the spring 2010 semester. Both the paper and online version will be offered. **The course begins February 1 and runs until May 20, 2010. Registration opens January 4. To register, go to our website at <http://www.mdforest.umd.edu>.**

As there are no formal classes; you work from the comfort of your home using your own, a friend's, or a public woodlot. You will learn how to protect your trees from insects, diseases and fire; step-by-step procedures will walk you through a forest inventory and stand analysis; and the details of the forestry business will be presented, including tax nuances and the sale and harvest of forest products. Ultimately, the course exercises help you develop the framework for a management plan for your forest.

The cost for the forestry course is \$300.00. Included in the cost are copies of the supplemental readings (*A Sand County Almanac*, *The Woodland Steward*, *American Forests: A History of Resiliency and Recovery*, and a small pamphlet entitled *What Tree Is That?*). The paper version text and appendices are in binder form. Online users receive a CD of the text and appendices. A certificate of completion is awarded when all assignments are completed. But don't take our word for it. See it for yourself on our website at <http://www.mdforest.umd.edu>. There you can read a lesson from the text, view an interactive exercise, and read through detailed course information and FAQs.

For more information, contact Nancy Stewart at the University of Maryland Extension, Wye Research and Education Center, P.O. Box 169, Queenstown, MD, 21658; phone 410/827-8056, ext. 112; or email nstewart1@umd.edu. Remember, registration opens January 4. Check for details on our website today and mark the date for open enrollment on your calendar!

Maryland Department Of Agriculture News

Celebrating Maryland Agriculture -- November 2009

Cover Crops Planted in First Lady's Garden

As part of the [Grow It Eat It](#) campaign, First Lady O'Malley and her family have been harvesting vegetables throughout this summer. Last month, Master Gardeners and Maryland Department of Agriculture staff helped to prepare the garden for fall by harvesting the remaining vegetables and herbs and planting cover crops.

Like farmers, homeowners play an important role in protecting our soil and water resources, especially the Chesapeake Bay. Bare soil is highly susceptible to erosion by both wind and water. It is important to reestablish vegetation as soon as possible, whenever soil is exposed. You can plant cover crops in vegetable and flower gardens in the fall to keep the soil covered and reduce the risk of erosion. Cover crops also increase organic matter in the soil and tie up leftover nutrients. They should be tilled under at least two weeks before spring planting. Annual ryegrass, winter wheat, crimson clover, winter radish, and oats are examples of cover crops that you can use.

The [Grow It Eat It](#) campaign encourages Maryland families to improve health and save money by growing fresh vegetables, fruits and herbs using sustainable practices. Click [here](#) to learn more on ways to improve your lawn or garden and protect the Chesapeake Bay.

Court Decision Denies Payment to Maryland Tobacco Farmers

North Carolina Supreme Court ruled against Maryland on Nov. 6, effectively denying any further payment to Maryland tobacco farmers from the nation's largest tobacco companies under the 1999 National Tobacco Growers Settlement Trust (also referred to as the "Phase II" settlement). The case would have required Philip Morris, USA, Inc., R.J. Reynolds Tobacco Company, and Lorillard Tobacco Company to make payments through 2010 totaling about \$13 million for the benefit of Maryland farmers.

"We are disappointed by the N.C. Supreme Court decision in favor of the large tobacco companies and allowing them to back out of their agreement thereby inflicting a huge economic loss to Maryland tobacco



growers," said Maryland Agriculture Secretary Buddy Hance. " We feel those who should have received payments under this agreement have been unfairly treated and we will continue to discuss strategies to address this matter and make sure these individuals get the money they were promised." Click [here](#) for more details.

New MDA Website

MDA's website has a new, fresh look. It is now consistent with the template for state websites. If you have not visited our website lately, be sure to check it out. You will see the front page now features fun facts and a special note on how farmers are protecting the bay. The department plans to post new fun facts fairly frequently.

Also new, MDA is now on Twitter. If you are too, follow us twitter.com/MDAtweet. We post something just about every day. We are wading into social media to see how we can make it work best for MDA with the resources that we have.



A new Mastering Marketing Highlight is now available "What's Your Sign?" has been posted to the web:

<http://www.agmarketing.umd.edu/NewslettersPDF/AgMarketingHighlights/102609MMHighlightWhatsYourSign.pdf>

The Mastering Marketing Highlight is an important update that is published periodically between the issues of the Mastering Marketing Newsletter by Ginger S. Myers, Regional Agricultural Marketing Specialist.

If you have any questions or comments about this publication or have clients or colleagues that would value receiving it as well, please contact Ginger Myers at gsmyers@umd.edu or sbarnes6@umd.edu

Crop Insurance Profiles

Here's a new opportunity to develop a crop insurance program for your farm. Mark Powell has developed soundbooks as part of our crop insurance program. You can play them off the Web. The following are currently available:

http://remsberg.com/soundbooks/meeks_web/

http://remsberg.com/soundbooks/layton_web/

http://remsberg.com/soundbooks/rinehart_web/

http://remsberg.com/soundbooks/waverly_web/



Facts About...

CAFO/MAFO Environmental Permitting Checklist

Large or medium sized animal feeding operations (AFOs) that "propose to discharge" wastewater to waters of the State must apply for MDE's General Discharge Permit for Concentrated Animal Feeding Operations (CAFO), Federal discharge permit number MDG01. In addition, large AFOs that do not discharge wastewater to waters of the State must apply for a Maryland Animal Feeding Operation (MAFO) permit, State discharge permit number 09AF.

The following checklist will help you determine if you are required to apply for these permits and walk you through the six steps in the permitting process.

The standard turnaround time to register for CAFO or MAFO General Permit coverage is 180 days.

Contact Gary Kelman of MDE's CAFO Unit if you have any questions at 410-537-4423 or gkelman@mde.state.md.us.

Step 1: Use the following table to determine if your operation is a CAFO or a MAFO.

Animal Type	Size of Animal Feeding Operations based on Number of Animals or House Capacity in square feet		
	A	B	C
	Large	Medium	Small
Cattle (includes heifers)	1000 or more animals	300—999 animals	less than 300 animals
Dairy cattle	700 or more animals	200—699 animals	less than 200 animals
Horses	500 or more animals	150—499 animals	less than 150 animals
Veal	1000 or more animals	300—999 animals	less than 300 animals
Swine ≥ 55 pounds	2500 or more animals	750—2499 animals	less than 750 animals
Swine < 55 pounds	10,000 or more animals	3,000—9,999 animals	less than 3,000 animals
Sheep and lambs	10,000 or more animals	3,000—9,999 animals	less than 3,000 animals
Ducks with liquid manure handling *	5,000 or more animals	1,500—4,999 animals	less than 1,500 animals
Chickens with liquid manure handling	30,000 or more animals	9,000—29,999 animals	less than 9,000 animals
Ducks with dry manure handling	30,000 or more animals	10,000—29,999 animals	less than 10,000 animals
Laying hens with dry manure handling	82,000 or more animals	25,000—81,999 animals	less than 25,000 animals
Chickens (other than laying hens) with dry manure handling	125,000 or more animals or greater than or equal to 100,000 ft ²	37,500—124,999 animals and less than 100,000 ft ²	less than 37,500 animals
Turkeys	55,000 or more animals	16,500—54,999 animals	less than 16,500 animals

See detailed CAFO/MAFO Environmental Permitting Checklist online at

http://annearundel.umd.edu/files/CAFO_Checklist.pdf

New Department of Environment Permit for Agricultural Animal Feeding Operations to Take Effect December 1

Permit will Protect Chesapeake Bay, Allow Farmers to Move Ahead with New Operations

BALTIMORE, MD (October 13, 2009) - The Maryland Department of Environment will issue a general discharge permit, effective



December 1, 2009, for Maryland Animal Feeding Operations (MAFOs) and Concentrated Animal Feeding Operations (CAFOs). The permit implements regulations adopted in January for animal feeding operations. The permit and regulations require measures to control nutrient discharges from Maryland's largest agricultural animal operations and will better protect local waterways and the Chesapeake Bay.

A legal challenge by an environmental organization delayed the permit since January. The Department of

the Environment recently issued a final decision affirming the findings of the Office of Administrative Hearings' proposed decision to uphold the permit. While that decision has been appealed, the appeal does not stay the implementation of the permit. The permit is needed to allow farmers to comply with the regulations for new and existing animal operations.

New federal Environmental Protection Agency regulations governing CAFOs, along with the legal challenges to the Maryland permit developed to implement the new federal requirements, have created concern among farmers seeking to obtain permits for new poultry operations. MDE, the Maryland Department of Agriculture (MDA), soil conservation districts, and USDA's Natural Resource Conservation Services offer technical and financial assistance to farmers as they work to comply with permit requirements and further reduce nutrient impacts on the Bay and its tributaries.

Last year, the federal Environmental Protection Agency (EPA) revised its definition of what constitutes a surface water discharge as it pertains to animal feeding operations, resulting in a significantly higher number of large Maryland operations being defined as CAFOs (covered under a federal permit issued under state authority). Nearly 500 Maryland farmers filed Notices of Intent to comply with CAFO permit requirements by a February 27, 2009, deadline. Once the permit is effective, MDE will be able to move forward in processing these Notices of Intent and also move forward with registering new and existing operations as MAFOs.

Maryland Department of the Environment Secretary Shari T. Wilson said: "To protect the environment and public health, Maryland is reducing nutrient pollution from all sources – from wastewater treatment plants to septic systems and urban and suburban runoff – and this includes agriculture. This permit will help Maryland farmers further protect and restore the Chesapeake Bay by ensuring that all farmers are operating under clear and consistent guidelines."

"Maryland farmers have a long, outstanding record of environmental conservation," said Agriculture Secretary Buddy Hance. "Through their stewardship of our land and water, Maryland farmers have accomplished a lot, but we all need to do more if we want to reach our Bay restoration goals. The environmental leadership of Maryland farmers is a model for other states to follow."

The Department of Agriculture (MDA) has tracked the permit closely to ensure the permit is as manageable and affordable as possible for poultry and livestock farmers while further safeguarding water quality**.

**MDA provides financial and technical assistance for best management practices that may be warranted for

farmers to meet standards. Technical assistance and assistance in permit requirements is provided through local soil conservation districts**.

The MAFO permit requires a Soil Conservation and Water Quality Plan and a Nutrient Management Plan or a Comprehensive Nutrient Management Plan. Implementation of these technical-based plans help farmers manage fertilizers, animal waste, and other nutrient sources more efficiently to meet crop needs while preventing groundwater or surface water impacts. The permit also authorizes on-farm inspections and enforcement of any water quality problems by MDE.

MDE guidelines allow an operation to determine whether it is a CAFO or MAFO that must be covered under the general permit. That determination is based on the size of the operations and whether it proposes to or has the potential to discharge to surface waters. Detailed information will be sent directly to farmers about how to comply with the permit and its regulations on November 1, 2009. This information will allow for phased in adoption of the required comprehensive nutrient management plans in acknowledgement of concerns about the availability of NCRS staff to prepare the Plans.

The permit and regulations are part of a broad campaign to protect and restore the state's waterways, including the Chesapeake Bay. The effort to reduce nutrient pollution also includes upgrading wastewater treatment plants and septic systems, better managing urban and suburban storm water runoff, controlling emissions from power plants, planting cover crops, and expanding forested buffers and wetlands. Maryland has committed to new, two-year milestones that more than double the State's nitrogen reduction efforts and position the State to work with the federal Environmental Protection Agency on water restoration goals established as part of President Obama's Chesapeake Bay Executive Order.

Maryland farm operators have a long record of natural resource conservation:

- Since 1984, farmers have spent over \$12.25 million of their own money to match \$98 million in state and federal funds to install over 20,000 water quality best management practices (BMP) or about 2.5 BMPs per day, every day, for 24 years. Installation of agricultural BMPs on farmland will account for 67 percent of 2.5 million pounds of nitrogen of Maryland's recent 2011 Chesapeake Bay milestones.
- Ninety-nine percent of the state's 6,000 eligible farmers on 1.3 million acres (or 99 percent of cropland) are in compliance with the Nutrient Management Law.

- Farmers signed up to plant 330,500 acres of cover crops to take up excess nutrients over the winter.
- Landowners have installed riparian buffers and conservation cover on a total of 74,000 acres now in the Conservation Reserve Enhancement Program (CREP).
- Nearly 500 operations submitted a Notice of Intent for a federal CAFO permit by the February deadline so they would not be found out of compliance, even though they did not know for sure if they qualified as a CAFO.

For more information visit:

<http://www.mde.state.md.us/Permits/WaterManagementPermits/cafo.asp>

Ag Decision Maker Updates - Iowa Farm Outlook Newsletter

Wesley Musser, Professor & Extension Specialist
Farm management, Agricultural & Resource Economics
<wmusser@arec.umd.edu>

Iowa State University Extension recently posted new and updated information on the Iowa Farm Outlook, Ag Decision Maker, and the Ag Marketing Resource Center-Renewable Energy websites.

ISU Web sites:

Ag Decision

Maker <<http://www.extension.iastate.edu/agdm/>>

Iowa Farm

Outlook <<http://www.econ.iastate.edu/outreach/agriculture/periodicals/ifo/>>

AgMRC Renewable Energy

<http://www.agmrc.org/renewable_energy/>

Center for Ag Law and

Taxation <<http://www.calt.iastate.edu/>>

<<http://www.extension.iastate.edu/bfc/>>

Beginning Farmer

Center <<http://www.extension.iastate.edu/bfc/>>

Nutrient Management Update

Krista Mitchell, Nutrient Management Advisor
Anne Arundel & Howard Counties

The time to finish up those 2010 Nutrient Management Plans is NOW! All of the nutrient management advisors are busy making the final touches to 2010 nutrient management plans. Plans need to be completed and in producer's hands prior to nutrient applications, and prior to planting, and wait lists have already begun. The goal has been for producers to have their plans in their hands by January 1, 2010, and only a handful of people have contacted us so far. Producers may be turned away if they wait

too late to call and our waitlist cannot accommodate you. So, if you have not done so yet, please call your county's nutrient management advisor to get your 2010 nutrient management plan. Krista's normal days in the Anne Arundel County office are Mondays, Tuesdays, and every other Wednesdays, with the remainder of her time being spent in Howard County.

You are welcome to stop by our office any time to borrow one of our soil sampling probes. Our office is open Monday through Friday from 8:00 a.m. to 4:30 p.m. Our website contains soil and manure analysis price comparisons for the labs that may be used and the soil sampling procedures that must be followed for nutrient management planning purposes (do not follow the lab's soil sampling instructions!):

<http://extension.umd.edu/local/AnneArundel/AGNR/agbulletins.cfm>

Simply scroll down to section G, where you'll find all nutrient management related information. Contact your nutrient management advisor to find out exactly what analyses are needed to write your NMP and to discuss your soil sampling pattern before taking your samples.

Farmer Training and Certification Write Your Own Nutrient Management Plan

The Farmer Training and Certification course provides an opportunity for farmers to learn how to write nutrient management plans for their own operations. As a producer, you have first-hand knowledge of your own crops, animals, and equipment. Who better to write your nutrient management plan than you? This course will teach you how to do it!

You will receive:

- **A comprehensive training binder** – that will be used during the class, serve as a reference during the exam, and as a valuable resource when you write future plans for your operation.
- **Certification** – producers who pass the exam will be certified by MDA to write their own nutrient management plans.
- **Voucher training credits** – this class will fulfill the nutrient applicator voucher training requirements.
- **A discount** – on the purchase price *NuManPro*, Maryland's nutrient management planning software.

You will have the opportunity to:

- **Complete a nutrient management plan** for your operation that meets MDA regulations.

- In order to work on your own plan, you need to begin gathering information **now**. You will need a map or sketch of your operation, soil tests that are less than two years old and a recent manure analysis (if manure is applied to your land). Contact your county Extension office if you need assistance with this.

Registration Information

- Space is limited and applications are accepted on a first-come basis; therefore, **register early**. Registrations must be received 10 days before the first class. For more information, please call (410) 841-5959. Classes will be cancelled if there is lack of interest.

Day Classes 9:30 am – 4:30 pm
(\$35 total, \$15 for lunch on first day & \$20 for certification exam)

#1 Crop Operations using Litter & Fertilizer

University of MD Extension
 Wicomico County Office

January 19 and February 1 (exam)
(snow dates January 22 and February 3)

#2 Crop Operations using Manure & Fertilizer

Charlotte Hall Library

February 8 and February 22 (exam)
(snow dates February 12 & 26)

Nutrient Management Plan Update Sessions and NuManReporter Sessions

University of MD Nutrient Management Specialists will be hosting **Nutrient Management Plan Update Sessions** and **NuManReporter Sessions** throughout the State.

The *Plan Update Sessions* are an opportunity for you to meet with a Nutrient Management Specialist to get a quick refresher on *NuManPro* – which may be helpful if you haven't used the software in a year or more. The Specialists can answer your software and planning questions and help you get started on your 2010 Nutrient Management Plan. Click on the link below for the schedule and registration form:

http://anmp.umd.edu/Events/2009-2010_NMP_Update.pdf

The *NuManReporter Sessions* are designed to show you how to use the *NuManReporter* software. *NuManReporter* is a companion software to *NuManPro* and gives you the ability to electronically submit your Annual Implementation Report (AIR) to the MDA. Bring your nutrient application history from 2009 with you and you can submit your AIR that day.

Click on the link below for the schedule and registration information:

http://anmp.umd.edu/Events/2010_Reporter.pdf

Please note: Class sizes are limited and registration is required for all sessions so that we can be sure to have a computer available for each participant.

These sessions do not qualify for continuing education units.

If you have any questions, you may contact:
 Heather Hutchinson, Nutrient Management Specialist
 University of Maryland, 301-432-2767 ext 339
hhutchin@umd.edu



4-H News

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, contact Ruby Schwinn in the Anne Arundel County Office at 410-222-6759 or at rschwinn@umd.edu.

Family & Consumer Sciences



Educational programs are available to adults, youth, as well as seniors, schools and community groups, etc., on a variety of subjects including nutrition and healthy lifestyle, food safety and healthy homes. For more information, contact Naeemah Raqib, Extension Educator, Family and Consumer Sciences, at nraqib@umd.edu or call 410-222-6756.



Ag Web Modules
New website features in Anne Arundel County - Agricultural Program Teaching Modules:

<http://annearundel.umd.edu/AGNR/agmedia.cfm>

1. **Pasture Management**
<https://connect.moo.umd.edu/p12049696/>
2. **Pasture Herbicides**
<https://connect.moo.umd.edu/p13059797/>
3. **Handling Tall Fescue Toxicity Events**
<https://connect.moo.umd.edu/p59425434/>
4. **Modern Vegetable Production Technology for Early Market**
<https://connect.moo.umd.edu/p75657057/>
5. **Vegetable Herbicides for Controlling the Top 10 Weeds of Southern Maryland**
<https://connect.moo.umd.edu/p25962088/>
6. **Sustainable Low Input Strip-Till & No-Till Vegetable Planting Tactics**
<https://connect.moo.umd.edu/p55665058/>
7. **Fruit Establishment Tactics to Maximize Our Coastal Plain Advantage**
<https://connect.moo.umd.edu/p61165608/>
8. **Vineyard & Orchard Weed Control**
<https://connect.moo.umd.edu/p44883980/>
9. **Vineyard Establishment Supplies & Equipment**
<https://connect.moo.umd.edu/p48194311/>

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.

Other Updated County Website Features

Anne Arundel County Extension website:
<http://annearundel.umd.edu/>

Ag Newsletter *Production Pointers*
 The current and past agricultural newsletter additions are available for viewing or copy at:
<http://annearundel.umd.edu/AGNR/agnews.cfm>

Ag Bulletins
 An agricultural bulletin page is also available for viewing or copy under our hot topics section at:
<http://annearundel.umd.edu/AGNR/agnews.cfm>

Ag Web Modules
New website features in Anne Arundel County Agricultural Program Teaching Modules:
<http://annearundel.umd.edu/AGNR/agmedia.cfm>

College AGNR 150 Anniversary
 Also relive the history of Extension and University of Maryland College of Agriculture Land Grant Mission by viewing the 150 Years Anniversary PowerPoint:
<http://annearundel.umd.edu/files/University%20of%20Maryland%20150%20Year%20Anniversary.pps>



Thanks for Partnering
 Thanks for partnering with University of Maryland Extension, and supporting our programs.

R. David Myers, Extension Educator
 Agriculture and Natural Resources
 Anne Arundel & Prince George's Counties

NACAA Communication Award
 Individual Newsletter
 2002 National Winner



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

Anne Arundel Cooperative Extension
 7320 Ritchie Highway, Suite 210
 Glen Burnie, MD 21061
 410-222-6759 or 301-970-8250

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MARYLAND VEGETABLE GROWERS
ASSOCIATION

It is the policy of the University of Maryland Extension that no person shall be subjected to discrimination on the grounds of race, color, gender, religion, national origin, sexual orientation, age, marital or parental status, or disability.

Registration

Ticket Fee: \$15.00.

Please register by calling your local Extension office no later than February 8, 2010 to ensure lunch availability. Tickets will be held at the door. Thank You.

Anne Arundel Cooperative Extension
7320 Ritchie Highway, Suite 210
Glen Burnie, MD 21061
410 222-6759 or 301 970-8250

Calvert Cooperative Extension
150 Main Street, Suite 300
Prince Frederick, MD 20678
410 535 3662 or 301 855-1150

Charles Cooperative Extension
9375 Chesapeake Street, Suite 119
La Plata, MD 20646
301 934-5403 or 301 753-8195

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

St. Mary's Cooperative Extension
P. O. Box 663
Leonardtown, MD 20650
301 475-4482



Southern Maryland Vegetable & Fruit Meeting

Wednesday, February 10, 2010
Anne Arundel County Police
Southern District Station
35 Stepney Lane
Edgewater, Maryland



Bayside Bull Catering

7:30 a.m. **Doors Open**

8:00 a.m. **Visit Sponsor Displays**
Enjoy Coffee & Doughnuts



8:45 a.m. **Welcome & Maryland Vegetable Industry Update**
Dr. Jerry Brust
Extension Specialist
Vegetable Crops
University of Maryland

9:00 a.m. **Catnip Production**
Mr. Ben Beale
Extension Educator
St. Mary's County
University of Maryland

9:30 a.m. **Vegetable Weed Control Update**
Mr. Sudeep Mathew
Extension Educator
Dorchester County
University of Maryland

10:00 a.m. **UME Pumpkin Project**
Mr. Bryan Butler
Extension Educator
Carroll County
University of Maryland

10:30 a.m. **Break**

10:45 a.m. **Is Your Cover Cropping Practice Benefiting? A Soil Ecologist's Point of View**
Dr. Koon-Hui Wang
Faculty Researcher
Plant & Environmental
Protection Sciences
University of Hawaii at Manoa

11:15 a.m. **Eggplant Insect Control with Winter Cover Crops & Organic Insecticides.**
Dr. Cerruti Hooks
Extension Specialist
Integrated Pest Management
University of Maryland

11:45 a.m. **Survey of Neonicotinoid Use on Cucurbit Crops**
Dr. Galen Dively
Extension Specialist/Consultant
Professor Emeritus
Integrated Pest Management
University of Maryland



Noon

Partners & Sponsors Thank You! Lunch & Visit Sponsor Displays

1:00 p.m. **Vegetable Disease Control Update**
Dr. Kate Everts
Professor & Extension Specialist
Vegetable Pathology
University of Maryland

1:30 p.m. **Vegetable Insect Control Update**
Dr. Jerry Brust
Extension Specialist
Vegetable Crops
University of Maryland

2:00 p.m. **High Tunnel Tips: Mobile Tunnels & Weed Control Strategies**
Mr. Bryan Butler
Mr. Dave Myers
Extension Educators
Carroll & Anne Arundel County
University of Maryland

2:30 p.m. **Shallow Well Water Quality Testing**
Mr. Ben Beale
Extension Educator
St. Mary's County
University of Maryland

3:00 p.m. **Vegetable Irrigation & Nutrient Issues**
Dr. Jerry Brust
Extension Specialist
Vegetable Crops
University of Maryland

3:30 p.m. **Gap Survey**
Mr. Dave Martin
Extension Educator
Baltimore County
University of Maryland

3:45 p.m. **Fumigants & Pesticide Law Update**
Mr. Dave Myers
Extension Educator
Anne Arundel County
University of Maryland

4:15 p.m. **Adjourn & Visit Sponsors**

Remember to Sign Pesticide Recertification & Nutrient Management Rosters

