

Maryland Department of Agriculture | 2012 Annual Report Executive Summary



Governor Martin O'Malley



Lt. Governor Anthony G. Brown



Secretary Earl F. Hance



Deputy Secretary Mary Ellen Setting

Mission Statement

To provide leadership and support to agriculture and the citizens of Maryland by conducting regulatory, service and educational activities that assure consumer confidence, protect the environment, and promote agriculture.

Vision Statement

To achieve excellence in programs and in services that preserve and protect agricultural resources and the environment, promote profitable agriculture and consumer confidence, and enhance the quality of life for all Marylanders.



Wayne A. Cawley, Jr. Building 50 Harry S. Truman Parkway, Annapolis, Maryland 21401-7080 Baltimore/Annapolis (410) 841-5700 Washington Metro Area (301) 261-8106 MD Relay Service (TTY Users) (800) 735-2258 Toll Free (800) 492-5590 Fax (410) 841-5914 www.mda.maryland.gov



Shown on front cover: Robert Black and grandson Nathan Black, Catoctin Mountain Orchard.
Shown on back cover (top): Chuck Fry, Rocky Point Creamery.
Shown on back cover (bottom): Steve Ernst, Ernst Grain and Livestock and Belinda Burrier, Burrier Farm.
All cover photos and photo opposite page © Edwin Remsberg, www.remsberg.com

Design by Conni Leigh James, www.designz.com







Conservation Grants | 19|

Resource Conservation Operations | 20 | Nutrient Management Program | 20 |

2012 Annual Report Executive Summary



Office of the Secretary

The Office of the Secretary oversees all functions of the agency, including operational functions, such as fiscal administration, information technology and human resources. The Office of the Attorney General, Government Relations and Communications/Public Information operate under the direct purview of the Secretary and Deputy Secretary. Other initiatives in the office are:

 The Maryland Agricultural Land Preservation Foundation (MALPF), the nation's oldest and most successful farmland preservation program, preserves prime agricultural land and woodland by purchasing easements and restricting development.

During FY 2012: MALPF combined FY 2011 and FY 2012 appropriations -- nearly \$30.4 million – into one purchasing cycle to maximize the acres it could purchase. (Almost \$8.7 million of that was county funding used to match state funds at a ratio of 40:60). MALPF secured 59 offers representing nearly 6,800 acres. By the end of FY 2012, MALPF had purchased easements on 2,078 properties, permanently preserving 282,957 acres.



• The Maryland Agricultural Commission serves as an advisory body to the Secretary. Its 30 members represent the state's major commodity groups as well as the University of Maryland, food processors and other agricultural business segments.

During FY 2012: The commission provided the Secretary with feedback and recommendations on: nutrient management regulations, food safety, direct farm marketing and agritourism, animal manure management, anaerobic digesters, poultry litter and corn stover as feedstock, plant industries and pest management, the Farm Bill, crop insurance, and forestry issues.



Agricultural Commissioners held a public hearing in Garrett County to discuss issues and concerns with local residents



Office of Marketing, Animal Industries and Consumer Services

The Maryland Agricultural Fair Board

The Maryland Agricultural Fair Board provides grants to fairs and shows with funding from the Maryland Racing Commission and various fees. Its nine members are appointed by the Governor to five-year terms. During FY 2012, the Board's \$1.6 million budget funded 165 events, ranging from county fairs to youth activities in 4-H and FFA. The Board also published its annual guide to fairs and shows in Maryland.

Marketing and Agribusiness Development Program

Marketing and Agribusiness Development Program develops profitable marketing opportunities for Maryland farmers and agricultural producers.

During FY 2012, MDA:

- Connected farmers with consumers: More than 184,000 people visited the searchable database on the Maryland's Best website (www.marylandsbest.net) which helps consumers find local farm stands, farmers markets, and other farms products near them.
- Promoted the Buy Local Movement: Some 300 guests attended Governor Martin
 O'Malley's 4th Annual Buy Local Cookout and supported the kick off to the Buy Local
 Challenge, which encourages residents to eat Maryland-grown food during
 at least one meal every day during the week. Cookout guest included
 farmers, food writers, chefs, grocery store representatives, and state leaders.
- Increased understanding of agriculture among students through the Maryland Homegrown School Lunch Week and Farm to School Program: All 24 Maryland school systems participated in Maryland Homegrown School Lunch Week by buying at least one locally grown product for school lunches every day during the week. Maryland was the first state in the country to have all of its school systems participate. MDA Marketing works closely with the Maryland State Department of Education on the Farm to School program, now in its fourth year, which educates students about where their food comes from, how it is produced, and the benefits of a healthy diet. Governor O'Malley designated September 12-16, 2011, as Maryland Homegrown School Lunch Week.

Photo: (below) Donna
Sasscer, Agriculture and
Seafood Coordinator for
St. Mary's County, interacts
with students during Farm to
School Week.





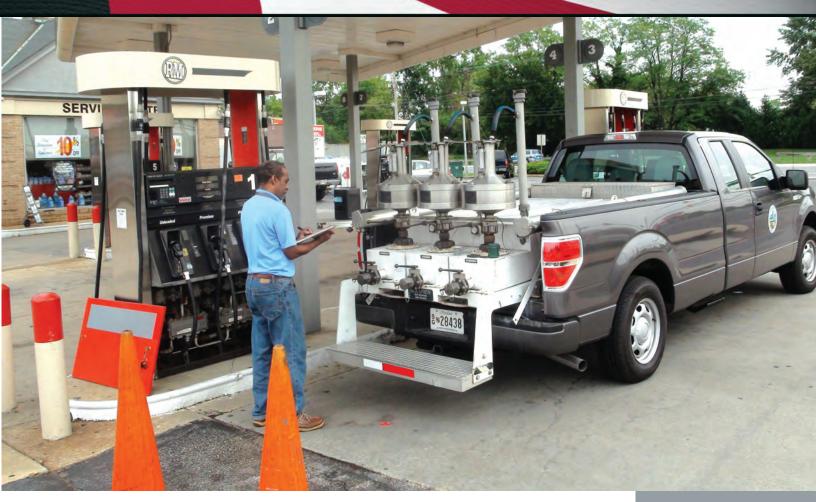


- Improved access to fresh produce for at-risk citizens: Farmers markets in all 23 counties and Baltimore City participated in the Farmers Market Nutrition Program (FMNP), funded by the USDA. More than 300 Maryland farmers received \$515,000 from the program which benefited 150,000 Women, Infants and Children and 4,000 seniors.
- Encouraged farmers to protect themselves: The Crop Insurance Program helps stabilize the Maryland agriculture economy by protecting farmers from weather and market volatility. During FY 2012, some 1,414 Maryland farmers joined the program, bringing the total farms covered to 6,654 more than half of all Maryland farms. More than \$400 million of agricultural production was insured on more than 900,000 acres.
- Represented Maryland products throughout the world: MDA represented Maryland's processed food companies in the Southern United States Trade Association (SUSTA) activities, including attending food trade shows in South Korea, Japan, Russia and Korea. MDA also worked with the United States Livestock and Genetics Export Association to promote the sale of sports horses to China. MDA also supported Maryland agribusinesses at the annual Cuban agricultural trade show, which resulted in the sale of \$60 million of soybeans and soybean meal.
- Annual Buyer Grower Expo: MDA sponsors the annual Buyer Grower Expo to provide
 Maryland farmers & producers with an opportunity to connect with buyers from
 retailers, restaurants, schools, and more. The event typically draws more than 300
 registrants, including produce farmers, artisan cheese and ice cream producers, beef
 and bison farmers, grocery store representatives, chefs, school nutrition directors,
 distributors, economic development officials, University of Maryland Extension officials,
 and regional agricultural marketing officials.



Photos: (counter clockwise from upper left) Drought-stricken corn. FMNP flyer at a farmers' market. Governor Martin O'Malley (center) talks with USDA Secretary Tom Vilsak (left) and Maryland Agriculture Secretary Buddy Hance at the 2011 Buy Local Cookout. (Bottom photo courtesy of Executive Office of the Governor)





Weights and Measures Program

MDA's Weights and Measures Program ensures that consumers get what they pay for whether it is a gallon of gasoline or a pound of hamburger. MDA's 18 inspectors test 60,911 weighing and measuring devices that are in commercial use at 9,161 businesses across the state.

In FY 2012, MDA:

- Issued 7,091 Weighing and Measuring Devices Registration Certificates;
- Inspected 40,886 devices and tested 8,261 individual lots of pre-packaged commodities;
- Conducted price verification inspections at 169 non-food stores and levied civil penalties to 18 firms for misrepresenting unit prices;
- Imposed \$90,750 in civil penalties for violations; and
- Investigated 584 consumer complaints. (Consumer complaints are given priority over routine inspections.)

Photo: (above) MDA Weights and Measures Inspector Aaron Webb tests gas pumps to make sure consumers get what they pay for. Next time you fill up, look for the orange inspection sticker on the pump.

Food Quality Assurance Program

MDA's Food Quality Assurance Program provides inspection services for food quality safety. It also conducts compliance audits of production practices, which are often required by buyers, to ensure production facilities comply with animal welfare, good agricultural practices, food security, food safety and quality assurance standards.

During FY 2012, MDA:

- Developed a Good Agricultural Practices (GAP) Program for small producers. During the past six years, MDA has received \$500,000 from USDA to develop and implement a GAP program for smaller producers who sell fruits and vegetables directly to school systems and consumers. MDA conducted training sessions for producers and began conducting audits to verify that producers participating in the program are complying with increasingly stringent food safety requirements.
- Provided critically needed Grading Services. Many commodity buyers require official certification from a Grading Services Program to ensure they are purchasing products that meet their specifications. MDA graded:
 - · 229.3 million pounds of poultry;
 - 27.9 million dozens of shell eggs;
 - 18.7 million pounds of meat;
 - · 0.14 million metric tons of grain; and
 - 0.82 million pounds of fruits and vegetables.
- Enforced the Maryland Egg Law by inspecting eggs at the wholesale, food service and retail levels to ensure eggs sold in Maryland meet food safety standards. Eighty-six percent of sampled eggs complied with the Maryland Egg Law.





- **Certified 76 organic farms** and 20 handlers of organic products through MDA's USDA-accredited Maryland Organic Certification Program.
- **Licensed 48 businesses** with 74 locations that buy, receive, exchange or store grain from a grain producer, in accordance with Maryland Grain Laws.
- Conducted the Poultry and Rabbit Slaughter Program, which provides food safety training and inspection for small producers who slaughter animals on farm and sell them to restaurants, at farmer's markets and other locations. Since the program began in May 2010, more than 280 producers have been trained; 37 producers have been certified.



Animal Health Program

The MDA Animal Health Program works to prevent and control infectious and contagious diseases in livestock and poultry, especially those that might threaten public health, endanger food supplies or threaten the economic security of the animal industries.

During FY 2012, MDA:

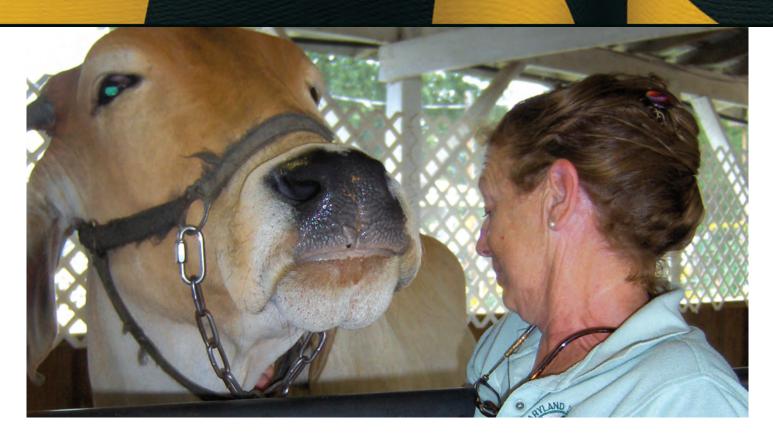
- Processed 47,717 certificates of movement for animals moving into or out of Maryland (either to cross state lines or for import/export);
- Inspected 37 exhibitions and processed 8,966 exhibition health certificates;
- Inspected 244 commercial livestock auctions and 33 livestock dealer operations or facilities;
- Evaluated 40 commercial animal biological products, mostly vaccines, and issued authorization letters to allow their use in Maryland; and
- Issued 130 import permits through the Contagious Equine Metritus Import Quarantine Station, an 8 percent increase over FY 2011. (CEM is common around the world but has been eradicated in the United States.)

Photos: (opposite page) Food Quality Assurance staff helps ensure a safe food supply through training and on-site inspections. (below) MDA's Animal Health staff routinely test food-producing animals and horses to help prevent or control contagious and

Other highlights include:

- The Animal Disease Traceability Program: During FY 2012, MDA conducted traceback tests for cattle, swine and poultry and determined that Maryland can meet the 24 to 48 hour proposed federal standard for identifying individual animals implicated in a disease outbreak.
- Premises Locations: Knowing where livestock and poultry flocks are physically located improves MDA's ability to trace animals during an outbreak. To date, 1,606 livestock premises are registered, which represents about 20 percent of livestock producers while 3,766 poultry premises are registered, with 384 new premises registered in FY 2012, an 11 percent increase from FY 2011.
- Protecting livestock and poultry through disease surveillance and response: During FY 2012, MDA placed 10 quarantines on farms; 263 routine quarantines on swine entering the state; and 130 quarantines on horses moving through the CEM Quarantine Import Stations. There were no serious animal health disease outbreaks during FY 2011.





Veterinary Diagnostic Laboratory System

MDA's Veterinary Diagnostic Laboratory System includes a livestock health laboratory in Frederick and a poultry health laboratory in Salisbury. The system supports USDA, other Maryland agencies, animal health agencies of other states, as well as veterinarians serving Maryland producers and farm animals. Both laboratories are long-standing members of the USDA's National Animal Health Laboratory Network (NAHLN) and both serve as Basic Sentinel Clinical Laboratories for the Maryland Department of

Health and Mental Hygiene for detecting diseases of public health importance.

During FY 2012, both laboratories completed an on-site accreditation audit visit to meet the laboratory accreditation requirements for international standards on selected tests by the American Association of Laboratory Accreditation (A2LA). Full A2LA accreditation is anticipated early in FY 2013.

ANIMAL HEALTH PROGRAM LABORATORY STATISTICS

DIAGNOSTIC ACTIVITY	NUMBER	TEST RESULTS
Mammalian Necropsy	153	n/a
Poultry Necropsies	1,053	n/a
Avian Influenza	8,605	All negative
Rabies	81	7 positive
Equine Infectious Anemia	15,270	All negative
Contagious Equine Metritis	1,365	All negative
Equine Herpesvirus (EHV-1)	25	4 positive
Johne's Disease in Cattle	3,091 Blood 269 Fecal	167 positive 83 positive



The State Board of Veterinary Medical Examiners (SBVME)

The State Board sets the standards that veterinarians, registered veterinary technicians, and veterinary hospital owners must comply with. The Board also licenses and/or registers veterinarians, veterinary technicians, veterinary hospitals and animal control facilities. It also investigates consumer complaints, initiates its own investigations, and determines whether disciplinary action shall be taken.

Photo: (opposite page)
Assistant State Veterinarian
Marla Stephens checks
livestock. MDA inspects
all commercial livestock
auctions in the state.

During FY 2012, the Board:

- Offered online renewals for veterinarians, veterinary hospitals, and veterinary technicians, becoming the first program within MDA to offer an online license renewal with credit card payments. About half of all veterinarians and registered veterinary technicians, and one-third of all veterinary hospital owners used the online renewal system during this first year of implementation.
- Proposed amendments affecting six regulatory chapters, the most notable of which do the following: update standards of practice and code of ethics, define Board actions, outline complaint procedures and case resolution procedures; and increase the Board's civil penalty authority.
- Obtained legislative changes that allowed the Board to adopt regulations allowing registered veterinary technicians to perform a wider array of procedures, consistent with their training.



PERFORMANCE MEASURES FOR FY 2012

Registrations issued for veterinarians	3,652
Licenses issued for veterinary hospitals	651
Number of hospitals inspected	441
Number of initial inspections (new hospitals/owners)	21
Total number of inspections conducted	460
Number of hospitals receiving follow-up inspections	12
Quality: Percent of hospitals passing inspection	97

Maryland's equine industry includes more than 79,000 equine animals valued at \$714 million and total assets worth more than \$5.6 billion, according to the **USDA National Agricultural** Statistics Service. The industry holds about 10 percent of Maryland's land (587,000 acres) and employs more than 28,000 people. Horse farms, which preserve valued green space and serve as a buffer to development, are a critical element in the maintenance of the state's agricultural heritage.

Maryland Horse Industry Board (MHIB)

The Maryland Horse Industry Board licenses and inspects commercial stables that solicit business from the public to ensure those operations provide minimum standards of care, as outlined in statute, and to promote Maryland's equine industry in all its disciplines, from recreational riding to international Thoroughbred racing. The Board also advises the Secretary on matters affecting the horse industry.

During FY 2012, the MHIB:

- · Licensed 578 horse stables across the state;
- Completed Phase I of a Maryland Horse Park Viability Study to determine whether establishing a horse park in Maryland makes good economic sense;
- Awarded \$21,444 in grants to 15 Maryland horse organizations and individuals to increase public awareness of the importance of the industry; and
- Developed the Touch of Class Award, a monthly recognition program
 that honors Maryland people and horses who achieve acclaim on the
 national and international level. During FY 2012, the program honored
 10 people and 11 horses from 9 counties in 10 different disciplines.

Office of Plant Industries and Pest Management

Note: Because of the seasonal nature of this program and calendar year federal reporting requirements, data are reported on a calendar year basis rather than a fiscal year basis.

MDA's Plant Protection and Weed Management Program

MDA's Plant Protection and Weed Management Program protects the health of plants and honey bees and serves as the state's expert on plant pests and agricultural quarantines. Its goal is to facilitate the production, sale, and distribution of Maryland nursery stock through inspection and certification activities.

Program staff works with USDA on the Cooperative Agricultural Pest Survey (CAPS), which documents the presence or absence of destructive, exotic pests in Maryland and other states. The survey also provides the data necessary to certify whether or not Maryland products can be exported to other countries. Early detection of exotic pests before they become established helps protect Maryland agriculture and the environment from devastating losses.



During 2011, MDA:

- Deployed and monitored 4,711 insect traps;
- · Collected 19,244 samples through various types of surveys;
- Conducted eight extensive surveys targeting 19 exotic pests that impact trees, stored products, field, fruit and vegetable crops, nursery stock, and natural areas;
- Conducted exotic wood borer surveys in six counties and Baltimore City at 15 sites; and
- Surveyed for exotic field and vegetable pests at nine vineyards in five counties.

Fighting the Emerald Ash Borer:

MDA conducts numerous surveillance programs to track pests and plant diseases which are, or have the potential to be, damaging to Maryland's green house and nursery industry. MDA's Plant Protection and Weed Management Program continued to track and fight the spread of the Emerald Ash Borer (EAB), which is highly destructive to ash trees, one of the state's most popular landscaping trees. The EAB has already killed hundreds of trees across Maryland and tens of thousands across the country. MDA developed a new action plan using all available strategies, including quarantine enforcement and chemical and biological control to limit its spread.

During 2011, MDA, with help from USDA, released 52,278 parasitoids at 12 sites with known infestations. Surveillance efforts increased with 2,610 purple prism traps monitored in 23 counties and Baltimore City. There were 883 submitted samples from the prism traps, identifying 1,920 EABs. Four new counties -- Allegany, Anne Arundel, Howard and Washington -- were detected to have EAB during the trapping survey. MDA and Federal quarantine orders, prohibiting the movement of ash materials and firewood, were revised to include all 14 counties west of the Chesapeake Bay and Susquehanna River. The EAB population in Maryland is continuing to spread, as documented by detections in Montgomery, Garrett and St. Mary's counties in 2012.

For a complete description of MDA's efforts to fight invasive species, see MDA's complete FY 2012 Annual Report online at www.mda.maryland.gov.

Maryland's
nursery and
greenhouse
industry is a
leading segment
of Maryland's
agricultural
economy,
ranking
second among
commodities,
with \$1.96
billion in total
gross receipts.



Other Plant Protection Programs

- The Apiary Inspection Program controls honey bee diseases and pests to maintain healthy colonies needed to pollinate Maryland crops valued at more than \$40 million. During FY 2012, MDA issued 3,376 permits for honey bee colonies to move into Maryland, primarily for overwintering, and 1,532 colonies to move out of Maryland for pollination services. For the sixth year, Maryland beekeepers sent 2,000 colonies to California for almond pollination.
- The Maryland Ginseng Management Program monitors the harvest and licenses diggers and dealers of wild, wild-simulated, woods-grown and cultivated ginseng. During the 2011-2012 season, MDA licensed 16 ginseng dealers and 323 ginseng collectors; and certified 142 pounds of dry wild ginseng root, 355 pounds of artificially propagated dry ginseng root, 10 pounds of green root, and 32 pounds of woods-grown root.
- Weed Integrated Pest Management (IPM) Program: MDA works with the State Highway Administration (SHA) to conduct an IPM program to control targeted weed species on SHA right of ways. MDA has conducted weed management and biological control research projects for 14 years with the SHA and other federal, state and local agencies.
- **Noxious Weed Management Program** supports the control and eradication of designated noxious weeds (Johnsongrass, shattercane, thistles, and multiflora rose) which cause \$25 million in losses annually to Maryland agriculture.

MDA's Forest Pest Management Program

MDA works with state and federal partners to control invasive pests that threaten the state's forests and urban landscape trees. Two of the most destructive pests to threaten Maryland during the year are discussed below. For a comprehensive review of the many specific pests that MDA surveys and battles, see the complete MDA FY 2012 Annual Report, available online at www.mda. maryland.gov.

- **The Gypsy Moth** is the most serious threat to oak forests in the United States. The first eggs were detected in Maryland in 1971, and the first extensive defoliation occurred ten years later.
 - During 2011, to determine potential areas of defoliation, MDA surveyed 467,815 acres of "high value" forested lands, which includes areas with development, recreational use, managed forest and wildlife resources, and other site conditions that render dieback and mortality economically and socially important. As a result, MDA treated 2,530 acres in Garrett County over four straight days in May.
- The Hemlock Woolly Adelgid (HWA) remains the major threat to the eastern hemlock. Infested hemlocks have been identified between Baltimore and Washington, D.C., and in natural stands between Harford and Garrett counties. *Laricobius nigrinis*, a predatory beetle of the HWA, has been released in several areas since 2004.
 - During 2012, MDA released 2,606 of these beetles in Garrett, Harford, Baltimore, Frederick and Washington counties. A joint task force of MDA and the Maryland Department of Natural Resources (DNR) prioritized more than 50 publically owned hemlock stands and selected them as the sites where suppression might be attempted. In conjunction with DNR and various partners, MDA treated 9,500 trees, either by tree injection or soil injection. There was a 77 percent reduction of HWA in treated trees when measured one year post treatment. Non-treated trees averaged a 20 percent reduction.





Mosquito Control Program

MDA's Mosquito Control program works to reduce the risk of mosquito-borne diseases and provide relief from mosquito nuisances. The program operates 61 light trucks, one heavy truck, three boats, seven all-terrain vehicles, 49 ULV sprayers, three units of earth moving equipment, and one aircraft.

During CY 2011, MDA:

- Provided mosquito control services in 16 counties. (Program costs are shared between MDA, local governments and participating communities. Participation is voluntary.)
- Treated a total of 1.8 million acres. Of that, 309,469 acres were sprayed by aircraft, which is the highest on record. (Coastal storms and high tides late in the 2011-12 season added as much as 30 inches of precipitation in some areas and extensive flooding of the coastal marshes. This, combined with moderate temperatures, provided favorable conditions for mosquito

development late in the season.)

 Collected 15 West Nile positive pools during 2011. The Maryland Department of Health and Mental Hygiene reported 19 human cases of West Nile virus illness, including one fatality.

MOSQUITO CONTROL ACTIVITY SUMMARY 2011 SEASON

COUNTY	GROUND LARVICIDING	GROUND ADULTICIDING	AIR LARVICIDING	AIR ADULTICIDING	TOTAL ACRES TREATED W/ INSECTICIDE
TOTALS	670.91	1,507,374.26	6,762	302,707	1,817,514.17

Note: Because of the seasonal nature of plant and pest programs above and its federal reporting requirements, data are reported on a calendar year basis, which includes the last half of FY 2012.

Pesticide Regulation Section

The Pesticide Regulation Section (PRS) regulates the use, sale, storage and disposal of pesticides. It also trains and certifies applicators to ensure that pesticides are applied properly and adverse effects to human health and the environment are prevented. MDA also enforces federal pesticide laws under a Cooperative Enforcement Agreement with the U.S. Environmental Protection Agency (EPA).

During FY 2012, MDA:

- Certified 128 new private applicators and renewed certificates for 1,563. Currently, there are 3,252 certified private
 applicators in Maryland. (Private applicators are individuals applying restricted use pesticides to their own or rented land to
 produce agricultural commodities.)
- Certified 529 new commercial pest control applicators; approved and monitored 456 recertification training sessions; and recertified 3,634 applicators. Commercial applicators apply general use and restricted use pesticides as employees of licensed pest control businesses, not-for-hire businesses or public agencies.
- · Certified 1,077 public agency applicators;
- Conducted 750 routine business inspections and cited 222 businesses for violations of the Pesticide Applicators Law and Regulations;
- Inspected 78 pesticide dealers to ensure that restricted use pesticides were sold only to certified applicators;
- Investigated 108 consumer complaints; and
- Inspected 28 pesticide producer establishments and 33 market places.

MDA operates two programs to help ensure pesticides are disposed of properly:

- The Pesticide Container Recycling Program collected and recycled 43,050 pesticide containers weighing 39,000 pounds from growers and commercial pesticide applicators at 22 locations in six counties and at 13 pesticide dealer/custom applicators sites.
- The Pesticide Disposal Program collected and properly disposed of 17,866 pounds of unwanted or unusable pesticides from 54 farmers and growers in 16 counties. Since the program began, MDA has properly disposed of more than 185,000 pounds of pesticides.





State Chemist

The state chemist protects consumers and the environment from unsafe and ineffective products by conducting laboratory analyses on pesticides, feeds, pet foods, fertilizers, compost, soil conditioners and agricultural liming materials.

During FY 2012, the state chemist:

- Registered 12,381 pesticide products; 3,608 fertilizers;
 423 soil conditioners; 671 fertilizer/pesticide mixtures;
 153 liming materials; and 15,201 commercial feeds;
- Brought 282 previously unregistered products into compliance; and
- Performed 1,109 on-site inspections of randomly selected products at retail outlets, distribution centers, warehouses, and formulating facilities.

Laws Affecting the Chesapeake Bay and Human Health:

Recent legislation requires lawn fertilizers sold and used in Maryland to contain reduced levels of phosphorous. Other legislation requires animal feed for chicken to contain no deliberately added arsenic. During FY 2012, MDA's state chemists began developing practical, affordable laboratory procedures and methods so that it can precisely measure available phosphorus in fertilizers as well as deliberately added arsenic in feed.

Compost Facility Operator Certification: The Maryland Commercial Compost Law requires an MDA certified facility operator to be onsite to oversee the manufacturing process from beginning to end. Before becoming a certified compost facility operator, an individual must pass an examination on the manufacturing of commercial compost. Eight people took the exam during FY 2012. Additionally, individuals passing the exam must fulfill specific continuing education requirements to maintain their certification. This involves attending training courses approved by the Maryland State Chemist as well as participating in facility inspections conducted by State Chemist inspectors.

PRODUCT REGISTRATION & ENFORCEMENT ACTIONS

PRODUCT REGISTRATION	FY 2012
Pesticides	12,381
Fertilizers	3,608
Soil Conditioners	423
Fertilizer/Pesticide mixtures	671
Liming materials	153
Feeds	15,201
TOTAL	32,437
Companies with registered products	2,810
Registrants	2,315

ENFORCEMENT	FY 2012
Non-Registered Notices	282
Stop Sale Orders	159

INSPECTION PROGRAM

INSPECTIONS (FEED, FERTILIZER, PESTICIDE, COMPOST, ETC.)	FY 2012
Plants, warehouses, retailers, etc.	1,109
Ruminant Tissue (BSE) inspections - FDA	50
Pesticide Data Program sites visited (USDA/MDA)	251
Pesticide Date Program samples collected (USDA/MDA)	717
Maryland grown produce food safety samples (farmers markets, roadside stands, etc.)	162

Turf and Seed Program

The Turf and Seed program helps ensure that Maryland vegetable growers, turfgrass professionals and other farmers have high quality seed, the most important input to successful farming. Under the Maryland Seed Law, all seed sold in the state must be accurately labeled and is subject to inspection by MDA.

Seed Certification: With private companies releasing more crop varieties, demand for quality assurance inspections by third parties has increased, particularly from small to medium-sized seed companies. MDA helps seed growers and conditioners produce a product that meets some of the highest quality standards in the United States. Maryland seedsmen have become a net exporter of wheat, barley, and soybean seed, adding much revenue to the Maryland agriculture economy.

Supervised Seed Mixing enables certification to be continued when certified lots of different kinds and varieties of seeds are mixed together. MDA's oversight of this process ensures that consumer receive quality seed, not low quality substitutions. Many county and local governments, school systems, golf courses, recreation departments and professional seeding contractors require that the seed they purchase be mixed under this program.

TURF AND SEED ACTIVITIES 2012

FIELD INSPECTIONS		
Acres of Turf Inspected	4,811	
Acres of Crop Seed Inspected	10,951	

SUPERVISED MIXING	
Pounds of Seed Mixed (thousand)	2,151

RETAIL AND WHOLESALE SEED INSPECTIONS		
Number of Lots Sampled	995	
Number of Regulatory Seed Tests Conducted	2,972	

SEED TESTING	
Purity Service Tests Conducted	3,140
Germination Service Tests Conducted	4,439





MDA: A Partner in Chesapeake Bay Restoration

Under the Clean Water Act, the U.S. Environmental Protection Agency (EPA) has set limits on the amount of nutrients and sediment that can enter the Chesapeake Bay. States in the Bay watershed have developed Watershed Implementation Plans (WIPs), outlining strategies to achieve these pollution limits, known as the Total Maximum Daily Load (or TMDL).

MDA staff worked with local soil conservation districts to complete the agricultural component of Maryland's Phase II WIP. The plan outlines specific actions local partners need to take to help Maryland meet its water quality goals in five major tributary basins:

- 1. Potomac River
- 2. Eastern Shore
- 3. Western Shore
- 4. Patuxent River and
- 5. Maryland's portion of the Susquehanna River.

During the fiscal year, agricultural workgroups spent months gathering preliminary data and holding meetings in each of Maryland's 23 counties. Workgroup members included farmers and representatives from soil conservation districts, environmental groups, agricultural interests, government agencies and University of Maryland Extension. More than 1,000 people worked to identify local opportunities to install additional best management practices and assure that agricultural nutrient loads could be addressed. On May 30, 2012, following a public comment period, EPA approved Maryland's Phase II WIP.

Revised Nutrient Management Regulations. During FY 2012, MDA proposed revisions to its nutrient management regulations which were designed to achieve consistency in the way all sources of nutrients are managed and to help Maryland meet the nitrogen and phosphorus reduction goals in the WIP. Changes include restrictions on winter application of organic nutrients, nutrient application setbacks, limits on fall fertilization of small grains and the requirement to incorporate manure and sludge. In crafting the proposed regulations, MDA relied on the best available science from the University of Maryland as well as input from Governor O'Malley's BayStat Scientific Panel and various stakeholders. The regulations will become effective October 15, 2012.



Office of Resource Conservation

MDA's Office of Resource Conservation helps Maryland farmers implement conservation practices that balance crop and livestock production with natural resources protection. The office provides educational and financial assistance, technical assistance, and regulatory programs to improve agricultural management and help Maryland meet its Chesapeake Bay restoration goals. Conservation staffers work with local, state and federal agencies to implement policies established by the State Soil Conservation Committee. The Office of Resource Conservation is comprised of four key areas: Program Planning and Development, Conservation Grants, Conservation Operations, and the Nutrient Management Program.

State Soil Conservation Committee

Established in 1938, the State Soil Conservation Committee (SSCC) consists of 11 members representing local soil conservation districts and state and federal agriculture and natural resource agencies. It coordinates the activities of Maryland's 24 soil conservation districts and appoints SCD supervisors. SSCC also develops, reviews and refines policies on soil conservation and water quality issues, while advising the Secretary of Agriculture on these matters.

During FY 2012, the SSCC approved or recommended the following policy initiatives:

- An increase in the cost-share ceiling for animal waste management projects financed through the Maryland Agricultural Water Quality Cost-Share Program (MACS)
- Modifications to the information required for supervisor nominations
- Streamlining measures for Maryland's conservation delivery system
- Eligibility guidelines and standards for the 2012-2013 MACS Cover Crop Program
- · A comprehensive overview of staff training needs

Program Planning and Development

Program Planning and Development plans, develops and coordinates policy, programs, and public information about resource conservation issues and nonpoint-source pollution. Programs and activities are coordinated among local soil conservation districts, federal and state agencies, and public and private agricultural and natural resource organizations. The section also provides staffing support to the State Soil Conservation Committee, Governor O'Malley's BayStat Program and the Conservation Reserve Enhancement Program Advisory Committee.

In FY 2012:

• New priority watershed maps based on the Chesapeake Bay model were developed for soil conservation districts to assist in



determining eligibility for cover crop bonus payments;

- Staff continued to work with an interagency committee to revise and update the Maryland Integrated Map (MDiMap), a statewide data viewer that allows government agencies and the public to access state, local and municipal government spatial data sets and GIS applications. One of the applications contained in MDiMap is AgPrint, which targets areas for preservation and establishes conservation priorities;
- Developed and implemented an outreach campaign to promote the Cover Crop Program and produced the spring and winter editions of the Maryland Nutrient Management Program's newsletter to inform and update 6,500 farmers and certified nutrient management consultants on program updates.

Conservation Grants

In FY 2012, the Maryland Agricultural Water Quality Cost-Share Program (MACS) provided farmers with:

- \$25.5 million in grants to install 2,238 conservation projects that control soil erosion, reduce nutrient runoff and protect water quality in streams, rivers and the Chesapeake Bay. These projects will prevent 2.8 million pounds of nitrogen and 125,000 pounds of phosphorus from entering Maryland waterways each year. Farmers who received these cost-share grants invested \$1 million of their own money into these conservation projects.
- \$162,000 in Low Interest Loans for Agricultural Conservation to help pay for manure handling and conservation equipment.

During the year:

- The Cover Crop Program provided farmers with \$19.8 million in grants to help offset seed, labor and equipment costs associated with planting a record 430,000 acres of cover crops -- 9 percent more than last year. The fall planting helped prevent 2.6 million pounds of nitrogen and 86,000 pounds of phosphorus from reaching the Bay watershed.
- The Manure Transport Program provided \$297,587 in state grants to transport 35,380 tons of poultry, dairy, beef and other animal manure to approved farms and businesses. Delmarva poultry companies provided matching funds to transport poultry litter, bringing the total financial support provided to farmers to \$587,354.
- Conservation Reserve Enhancement Program (CREP) provided 132 landowners with \$394,000 in state and federal cost-share funds to install stream protection measures on environmentally sensitive cropland which has been taken out of production for 10 to 15 years to protect water quality and wildlife habitat.

The 20112012 cover
crop planting
is the largest
in Maryland
history and
exceeds
Maryland's
2013 Bay
Milestone goal
by 21 percent.

Resource Conservation Operations

This program provides operating funds and staffing support to the state's 24 soil conservation districts for promotion and delivery of local soil conservation and water quality programs.

In FY 2012:

- MDA's 78 technical experts in local soil conservation districts across the state helped farmers update Soil Conservation and Water Quality Plans that protected 37,350 acres of farmland. Overall, 891,000 acres of agricultural land are being managed under a SCWOP.
- MDA field staff helped Maryland farmers install 3,275 highly valued BMPs on their farms.
- MDA received 105 complaints concerning agronomic issues, odors, manure and livestock concerns. Ninety-seven of these complaints were corrected or closed, seven complaints are pending and one enforcement actions was initiated.
- The Maryland General Assembly authorized MDA to expand its Nutrient Trading Program to include both nutrient and sediment credits.
- MDA managed 27 ongoing research and technical assistance grants totaling \$6.7 million for special programs and demonstration projects.
- MDA received a \$265,000 Conservation Innovation Grant from USDA that will allow innovative new drainage management practices to be used by 101 public drainage associations (PDAs) on the Eastern Shore, which together maintain 820 miles of drainage ditches that drain 183,000 acres of agricultural and developed land.
- MDA and the State Soil Conservation Committee sponsored the Envirothon program for high school students.

Nutrient Management Program

Farmers grossing \$2,500 a year or more and livestock producers with 8,000 pounds or more of live animal weight must follow nutrient management plans. These science-based plans specify how much fertilizer, manure or other nutrient sources may be safely applied to individual fields to support crop growth while preventing excess nutrients from contaminating waterways. Non-agricultural nutrient applicators, including commercial lawn care companies, landscapers, golf course managers and public groundskeepers, must follow University of Maryland guidelines when applying nutrients.

Agricultural Nutrient Management Program

During FY 2012:

• 99.6 percent of the state's 5,433 regulated farm operators were in compliance with the requirement that farmers submit copies of their original nutrient management plans to MDA.



- MDA issued warning notices to 1,586 farmers who failed to file Annual Implementation Reports, followed by 451 notices of pending fines and 127 default notices.
- 98 percent of regulated farmers managing more than 1.2 million acres, submitted Annual Implementation Reports by the end of the fiscal year.
- Eight nutrient management specialists conducted 647 on-farm audits, representing 12 percent of the farms regulated by the program. Specialists issued 189 warnings to correct major violations; 20 percent of the non-compliant operators corrected problems by the end of the fiscal year.
- Certified 20 new consultants who passed the Nutrient Management Certification Exam.
- Trained and certified 44 farmers to write their own nutrient management plans.
- Conducted 31 Nutrient Applicator Voucher training sessions attended by 722 individuals.
- Sponsored 44 education classes on nutrient management topics attended by 1,145 people; and approved an additional 32 courses and field events sponsored by other organizations.
- Provided a two-day training course for 25 people planning to take the Nutrient Management certification exam; 72 percent passed.



Urban Nutrient Management Program

MDA's Urban Nutrient Management Program spent much of 2012 gearing up to implement the phased-in requirements of the *Fertilizer Use Act of 2011*. The new law requires MDA, with technical guidance from the University of Maryland Extension, to establish a training, certification and licensing program for lawn care professionals and to conduct a homeowner education program on Bay-friendly fertilizer practices. MDA currently regulates about 700 non-agricultural individuals and companies that apply fertilizer to 10 or more acres a year, a figure that will more than double next year when the new lawn fertilizer law takes effect.

During FY 2012, MDA:

- Reviewed the records of 41 golf courses, 27 lawn and landscape companies and three public lands maintenance offices; 22 warnings were issued for non-compliance.
- Received a \$100,000 grant from the Chesapeake Bay Trust to establish a training program for lawn care professionals and develop a database to track urban progress in meeting Maryland's WIP goals.
- Provided three training sessions for about 150 lawn care technicians and professionals in FY 2012.





