





*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.



## **Maryland Department of Agriculture**

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As we at the Maryland Department of Agriculture celebrate 40 years of service to the people of this state, we re-dedicate ourselves to the programs and 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. For us at MDA, it is a pleasure and an honor to serve you. We look forward to continuing our proud tradition of service for another 40 years.



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## 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 Assistant 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 listed here.

- **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 2013: MALPF combined appropriations from FY 2012 and FY 2013 so that it could conduct one easement acquisition offer cycle and maximize the number of acres purchased. MALPF had nearly \$53.6 million available for this cycle. Of this, about \$12.4 million was county funding used to match state funds at a ratio of 60 percent state to 40 percent county dollars. MALPF secured acceptances on 54 offers which represent almost 6,749 acres. At the end of FY 2013, MALPF had purchased

easements on a cumulative total of 2,102 properties, permanently preserving 285,902 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 2013: The commission hosted notable speakers and subsequent in-depth discussions about the Maryland Agricultural Land Preservation Foundation, the Maryland poultry industry, nutrient trading, the Phosphorus Site Index, updates to the University of Maryland campus farm, Maryland's Farm to School Program, the Maryland's Best Program, the Sensitive Crop Locator Program, the Turf and Seed Program, the Animal Disease Traceability Program, LEAD Maryland Foundation, Maryland Agricultural & Resource-Based Industry Development Corporation and various legislative issues.

- **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 2013: 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.



*The Maryland Agricultural Commission toured Hancock's Resolution in Anne Arundel County during its fall 2012 tour.*



## OFFICE OF MARKETING, ANIMAL INDUSTRIES AND CONSUMER SERVICES

### MARKETING AND AGRIBUSINESS DEVELOPMENT PROGRAM

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

#### During FY 2013, MDA:

- **Continued to promote the Buy Local Initiative** which preserves jobs and open space and grows the Maryland economy. The state Farm to School program, signed into law by Governor O'Malley, has grown to be ranked 5th in the nation in the percent of school food budgets spent on local agricultural products. USDA says 21 percent of funds for food at schools are spent on local, \$8.5 million. The top local items are milk, apples, peaches, tomatoes and corn. MDA's Maryland's Best program linked 122 farmers with buyers at grocery stores, food distributors, restaurants and processors this year. The fruit and vegetable sector which this program primarily supports is responsible for employing 2,200 Marylanders and has an economic impact of \$539 million annually according to the University of Maryland (Ferris, Lynch study, 2013). The Farmers Market Nutrition Program also connected 240 farmers with WIC recipients and low income seniors who received \$535,000 to spend at farmers markets on fresh, local produce.
- **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 2013, some 6,806 Maryland farmers insured 923,000 acres for \$420 million.



- **Connected farmers with consumers:** More than 37,400 people visited the searchable database on the Maryland's Best website ([www.marylandsbest.net](http://www.marylandsbest.net)) which helps consumers find local products.
- **Promoted the Buy Local Movement:** Some 400 guests attended Governor Martin O'Malley's fifth Annual Buy Local Cookout and supported the Buy Local Challenge, which encourages residents to eat Maryland-grown food at least one meal every day during the week. Cookout guests included farmers, food writers, chefs, grocery store representatives, and state leaders.
- MDA's annual Buyer-Grower meeting, connecting farmers directly with buyers, had more than 60 farms and 350 buyers in FY 2013. This event has grown from fewer than 30 attendees a decade ago.
- MDA's Marketing Section administers USDA's Specialty Crop grants. During FY 2013, MDA awarded \$393,851 to five projects that enhanced the competitiveness of specialty crops in Maryland.
- **Partnered with the Maryland Agricultural Education Foundation (MAEF) to create the Mid-Atlantic Farm-Based Educators Network** as part of the Maryland Farm to School Program. MDA and MAEF held several workshops designed to provide important information to farms that work with school groups. The workshops featured an educational overview of standards-based teaching; information about working with school districts, environmental literacy, and Farm to School initiatives.
- **Represented Maryland products throughout the world:** MDA represented Maryland's processed food companies in the Southern United States Trade Association (SUSTA) activities, including food trade shows in South Korea, Japan, Russia and in-bound buyers from Korea. As a member of the United States Livestock and Genetics Export (USLGE) Association, MDA promoted Maryland livestock genetics in Russia.



## FOOD QUALITY ASSURANCE PROGRAM

MDA's Food Quality Assurance Program provides food safety and inspection services. 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.

**Good Agricultural Practices:** MDA has received \$600,000 in grants from USDA during the past seven years to develop and implement a Good Agricultural Practices (GAP) program that helps both small and large producers of fruits and vegetables meet increasingly stringent buyer and federal food safety requirements. MDA conducts training sessions for producers and last year began conducting audits to verify that producers participating in the program are complying with requirements. GAP training sessions covered basic food safety practices, writing and implementing food safety plans and specific information for the safe production and handling of high risk crops. The number of GAP audits conducted has continued to increase not only because more wholesale and retail chain buyers require the audits but also because the U.S. Food and Drug Administration proposed regulations as a result of the Food Safety Modernization Act during FY 2013.



## WEIGHTS AND MEASURES PROGRAM

The regulation of weights and measures is one of the oldest functions of government. The Weights and Measures Program ensures that consumers get what they pay for whether it is a gallon of gasoline or a pound of hamburger. Purchases that require measurement affect virtually every consumer in the state and involve millions of individual transactions annually. Having uniform standards of measurement creates fairness and confidence in the marketplace and benefits both buyers and sellers. MDA's 18 inspectors test 60,806 weighing and measuring devices that are in commercial use at 9,160 businesses across the state.

### During FY 2013, MDA:

- Inspected 38,932 devices and tested 8,733 individual lots of pre-packaged commodities;
- Conducted price verification inspections at 145 non-food stores and levied civil penalties to 18 firms for misrepresenting unit prices;
- Imposed \$53,900 in civil penalties for violations; and
- Investigated 553 consumer complaints. (Consumer complaints are given priority over routine inspections.)



## 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 2013, MDA:

- Processed 38,214 certificates of movement for animals moving into or out of Maryland (either to cross state lines or for import/export);
- Inspected 93 exhibitions (fairs and shows) and processed 7,937 exhibition health certificates;
- Inspected 236 commercial livestock auctions and 12 livestock dealer operations or facilities;
- Evaluated 32 commercial animal biological products, mostly vaccines, and issued authorization letters to allow their use in Maryland; and
- Issued 133 import permits through the Contagious Equine Metritis Import Quarantine Station. (CEM is common around the world but has been eradicated in the United States.)

### Other highlights include:

**Animal Disease Traceability (ADT) Program:** In January 2013, the USDA published the final rule for Animal Disease



### During FY 2013, MDA:

- Provided critically needed Grading Services and graded:
  - 271.3 million pounds of poultry;
  - 28.2 million dozens of shell eggs;
  - 14.9 million pounds of meat;
  - 7.4 million metric tons of grain; and
  - 9.4 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. 85.42 percent of sampled eggs complied with the Maryland Egg Law, down from 86.48 percent last year.
- Certified 76 organic farms and 24 handlers of organic products through MDA's USDA-accredited Maryland Organic Certification Program.
- Licensed 35 businesses with 67 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 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 300 producers have been trained; 39 have been certified.



Traceability with regulations taking effect in February. The goal of ADT is to use automated record keeping, similar to that used for tracking packages, to trace the movements of animals implicated in a disease outbreak within 24-48 hours. The two largest means to improve traceability are premise location registration and official identification tags on cattle.

- **Premise locations:** To date, 1,696 livestock premises are registered, which represents about 20 percent of livestock producers; 4,115 poultry premises are registered, with 349 new premises registered in FY 2013.
- **Identification tags:** Since February 2013, MDA distributed 5,700 official identification tags to producers and veterinarians.

**MDA Animal Sheltering Program:** MDA is responsible for setting up state animal shelters during a natural disaster. An MDA Pet Sheltering Task Force was set up and Memorandums of Understandings were established with the American Society for the Prevention of Cruelty to Animals (ASPCA), the National Animal Rescue and Sheltering Coalition (NARSC) and the American Veterinary Medical Association (AVMA) to provide emergency assistance for pet sheltering during disasters. MDA also purchased additional pet shelter supplies including trailers and animal crates to enable initial MDA response for up to four state shelters.

### 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 2013, both labs were presented with full accreditation as well as a successful annual review by the

## ANIMAL HEALTH PROGRAM LABORATORY STATISTICS

DIAGNOSTIC ACTIVITY	NUMBER	TEST RESULTS
Mammalian Necropsy	186	n/a
Poultry Necropsies	6,578	n/a
Avian Influenza	9,004	All negative
Rabies	90	7 positive
Equine Infectious Anemia	14,417	All negative
Contagious Equine Metritis	1,577	All negative
Equine Herpesvirus (EHV-1)	20	0 positive
Johne's Disease in Cattle	2,745	144 positive

American Association of Laboratory Accreditation (A2LA). During FY 2013, the Salisbury lab expanded its accredited scope of work to include Newcastle, Velogenic Newcastle Disease and Swine Influenza in addition to Avian influenza and Salmonella. The Frederick Laboratory performs Avian Influenza and Contagious Equine Metritis under the A2LA accredited scope of work. Laboratory accreditation demonstrates competence, impartiality, performance capability, and data traceability that meets or exceeds national and international standards.







## THE STATE BOARD OF VETERINARY MEDICAL EXAMINERS

The State Board of Veterinary Medical Examiners (SBVME) 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.

During FY 2013, the Board established requirements for those seeking registration as veterinary technicians who do not have degrees from accredited veterinary technology programs.

### PERFORMANCE MEASURES FOR FY 2013

Licenses Issued to New Veterinarians	150
Registrations Issued to Veterinarians	2,679
Registrations Issued to Registered Veterinary Technicians*	142
Licenses Issued to Veterinary Hospitals	582
Percentage of Veterinary Hospitals Inspected and in Compliance	99
Number of New Complaints Received**	89
Number of Complaints closed	92

\* Veterinary technicians are required to register every three years. This number reflects a combination of initial, first-time registrants, and individuals registered in prior years who re-registered.

\*\* For 2013, this number does not include five complaints that were separated into different docket numbers because multiple veterinarians were involved.



## MARYLAND HORSE INDUSTRY BOARD

The Maryland Horse Industry Board (MHIB) 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 2013, the MHIB:

- Licensed 619 stables – an increase of 41 over the previous year. The increase was due, in part, to an aggressive effort to contact stables in non-compliance. Legislation passed the previous year required stables with “one or more horses” rather than “five or more horses” to be licensed.
- Awarded \$25,350 in grants to 22 recipients involved in projects which promote equine projects/activities in the state.
- Published the first comprehensive *Official Guide to Maryland's Licensed Stables* which includes profiles and detailed maps of 383 licensed stables as well as 15 pages of feature stories and 130 photos. The Guide is available in a click-through format on the MHIB website. ([www.mda.maryland.gov/horseboard](http://www.mda.maryland.gov/horseboard))
- Published “4 Seasons, 50 Events” brochure which lists the state's 50 top equine spectator events.
- Continued to develop a Maryland Horse Park or branded Maryland Horse Park System by acquiring funding for Phase II of a Maryland Horse Park System Feasibility Study, scheduled to start in the fall of FY 2014.



MHIB also entered in the second of its five-year Strategic Marketing Plan. Key components include developing MHIB's social media presence on Twitter and Facebook; launching its Horse Pals program, which offers free monthly activities at stable and equines events to its members, now 450 strong; continuation of the Touch of Class Awards program which recognize national and international champions from Maryland; and launched a speaker series. MHIB also staffed exhibits or made presentations at 35 events during the year to promote Maryland's horse industry.



## 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.*

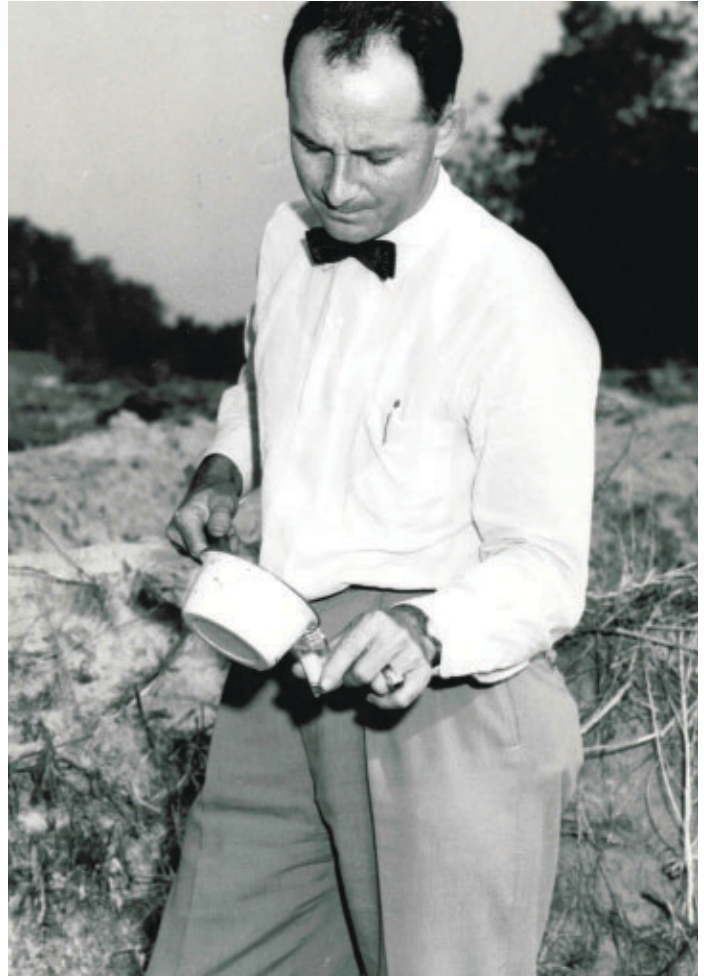
### PLANT PROTECTION AND WEED MANAGEMENT PROGRAM

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.

**Cooperative Agricultural Pest Survey:** Program staff works with USDA on the Cooperative Agricultural Pest Survey, 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 CY 2012, MDA:

- Deployed and monitored 3,009 insect traps;
- Collected 6,726 samples through various surveys;
- Conducted six extensive surveys targeting 22 exotic pests not known to occur in Maryland but that impact trees, stored products, field, nursery stock, and natural areas;
- Conducted exotic wood borer surveys in ten counties and Baltimore City at 16 sites; and
- Surveyed for exotic cyst nematodes by pulling soil samples from 30 fields in three counties. No target pests were detected.



**Apiary Inspection Program** controls honey bee diseases, parasitic mites, and other pests to maintain healthy colonies for the pollination of Maryland crops. Honey bees pollinate crops valued at more than \$40 million. Maryland fruit and vegetable growers rent 5,000 colonies a year to improve pollination.

**Nursery Inspection and Plant Quarantine:** The nursery and greenhouse industry ranks as Maryland's second largest sector, with \$960 million in farm income. Other horticultural products and services sold boosted total gross receipts to more than \$1.96 billion.



**During 2012, MDA:**

- Issued 92 state phytosanitary certificates to 14 states and U.S. territories. These certificates assure specific compliance with established domestic quarantines.
- Issued 588 federal phytosanitary certificates to 53 foreign countries. These certificates are required to export Maryland nursery stock.
- Inspected plant material at 488 Maryland locations to intercept dangerously injurious or exotic pests. The general health of Maryland-produced nursery stock was found to be excellent.



**Diagnostic Laboratories:** The Plant Protection and Weed Management diagnostic laboratories provide testing and analyses that support MDA programs and provide answers to inquiries from outside the department.

- **Entomology Laboratory** studies hundreds of plant, animal, and diseased specimens;
- **Plant Pathology Laboratory** evaluates plant samples for plant pathogens and diseases.
- **Greenhouse Laboratory:** Mile-a-minute weed plants were used to raise colonies of the stem boring beetle weevil. Four hundred twenty five tropical ash were maintained in the greenhouse in support of the EAB biological control program. Virus testing on nine

varieties of strawberry and two varieties of brambles was conducted, and plants to support the testing were maintained throughout the year.

The **Maryland Ginseng Management Program** protects American ginseng by monitoring the harvest and by licensing diggers and dealers of wild, wild-simulated, woods-grown and cultivated ginseng. During the 2012-2013 season, the program licensed 10 ginseng dealers and 270 ginseng collectors in the state.

**Weed Integrated Pest Management (IPM).** Entomologist and staff continued to work with the Maryland Department of Transportation, State Highway Administration (SHA) to conduct an IPM program to provide biological control to certain targeted weed species on SHA right of ways. MDA entered into a new one-year agreement with the Landscape Operations Division of the SHA to administer rearing and release programs to help manage state highway right of ways.

*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 as well as the state's forests and ecology. For a complete description of these efforts, see MDA's FY 2013 Annual Report.*





## FOREST PEST MANAGEMENT PROGRAM

The most destructive pests threatening Maryland forests are discussed below.

- 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.

Between August 2012 and March 2013, MDA conducted gypsy moth egg mass surveys on 527,837 acres of “high value” forested lands. During May 2013, MDA sprayed 11,996 acres in 61 spray blocks, mostly in Garrett County but some in St. Mary’s and Worcester counties as well.

- 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. A predatory beetle of the HWA has been released in several areas since 2004.

During 2012, a joint task force of MDA and Maryland Department of Natural Resources (DNR) prioritized more than 50 publicly owned hemlock stands and selected them as the sites where suppression might be attempted. MDA, with help of Boy Scout volunteers, treated 381 trees by soil injection. MDA, in conjunction with DNR Park Service, treated 552 trees by injection and 7,980 trees by soil injection. MDA staff alone treated 1,205 trees by injection and 2,436 trees by soil injection.

- The **Emerald Ash Borer** (EAB) is highly destructive to ash trees, one of the most popular landscaping trees in Maryland. It has already killed hundreds of trees across Maryland and tens of thousands across the country. During 2012, MDA’s Plant Protection and Weed Management Section with the Forest Pest Management section, with material and assistance from USDA, released 31,551 parasitoids at 12 sites with known infestation.

During 2012, a new federal survey model was deployed resulting in a large reduction of EAB survey traps in Maryland. There were 183 submitted samples from the prism traps, identifying 301 EABs from 33 positive sites.

EAB was detected in five new counties during the past year - Montgomery, Garrett, Saint Mary’s, Frederick and Calvert. The EAB population in Maryland is continuing to spread.



## PLANT PROTECTION AND WEED MANAGEMENT SUMMARY OF ACTIVITIES IN CY 2013\*

Beekeepers Registered	1,782
Honeybee Colonies Registered	13,924
Honeybee Colonies Inspected	3,841
Ginseng Dealers Registered	16
Ginseng Collectors Licensed	291
Nurseries Certified	330
Plant Dealers and Brokers Licensed	1,362
Phytosanitary Certificates Issued	364

*\*Because of the seasonal nature of this program and calendar year federal reporting requirements, data are reported on a calendar year basis.*



## 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 2012, MDA:

- Provided mosquito control services in 2,614 communities across the state. (Program costs are shared between MDA, local governments and participating communities. Participation is voluntary.)
- Collected three West Nile positive pools in Montgomery and Worcester counties.
- 15,522 mosquitoes were collected by mosquito control employees and sent to the Maryland Department of Health and Mental Hygiene (DHMH) diagnostic laboratory for virus isolation.
- Acquired a Kubota Excavator, Model 080-3, which will service projects in Dorchester, Somerset and Worcester counties.

**Repair of Crisfield Dike Damage from Hurricane Sandy:** In December 2012, MDA in cooperation with the Commissioners of Somerset County began an assessment of the entire Crisfield tidal dike system, which was damaged during Hurricane Sandy. The inspection revealed 20 breaches of which four were large "blowouts" of the entire dike. In addition to this damage, eight tide gate culverts had to be replaced.

Reconstruction operations took place between December 2012 and April 2013. Since then, the tide gates have been operating effectively. MDA will continue to monitor this tidal dike system to ensure that the repairs hold, which are critical in reducing residential flooding as well as reducing mosquito breeding habitat in the Crisfield community.

## MOSQUITO CONTROL ACTIVITY SUMMARY CY 2012

Communities participating in mosquito control program	2,614
Acres managed by open marsh water management	283
Acres treated with insecticide	1,359,100
Acres treated for mosquito larvae	6,234
Acres treated for adult mosquitoes	1,352,866
Acres treated by aircraft	151,066
Acres treated by ground equipment	1,208,034
Number of mosquitoes tested for arboviruses	15,522
Number of human cases of West Nile virus statewide	47*
Number of human cases of West Nile virus in areas with mosquito control	8
Number of cases of arbovirus in domestic animals	3
Number of mosquito pools positive for arbovirus	11**

\*6 Fatalities

\*\*3 Collected by MDA, 8 collected by the Department of Defense  
 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 first half of FY 2013.



- Licensed 1,553 commercial businesses and 154 not-for-hire businesses.
- Issued 327 public agency permits to governmental agencies.
- Issued 36 pest control consultant licenses.
- MDA currently has registered 8,063 employees of pesticide businesses and public agencies to apply pesticides under the supervision of certified applicators.
- Issued 153 dealer permits to businesses that sell restricted use pesticides.
- Conducted 601 routine business inspections, during which 142 businesses were cited for violations of the Pesticide Applicators Law and Regulations.
- Conducted 78 pesticide dealer inspections to ensure that restricted use pesticides were sold only to certified applicators.
- Investigated 26 consumer complaints.

## 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 2013, MDA:

- Certified 149 new private applicators and renewed the certification of 1,594 private applicators.
- Approved and monitored 118 private applicator recertification training sessions.
- Certified 596 new commercial pest control applicators and consultants.
- Certified 1,071 public agency applicators.
- Conducted 18 exam sessions during which 1,922 exams were administered to 850 applicants.
- Approved and monitored 456 recertification training sessions for commercial pesticide applicators which recertified 3,212 applicators.

**Integrated Pest Management (IPM) in Schools:** Regulations that require schools to develop IPM plans for indoor and school ground pest control became effective in 1999 and 2002, respectively. MDA continues to work with Maryland Public School districts on implementation of IPM on school property. In addition, PRS staff members serve as members of the Northeast Region IPM Center's School IPM Working Group, the Northeast Region's K-12 IPM Curriculum Subcommittee, and the Association of Structural Pest Control Regulatory Official's IPM in School Committee.

**Pesticide Sensitive Crop Locator:** In FY 2013, MDA launched an online mapping application that shows where commercial crops sensitive to pesticide damage are so pesticide applicators can take extra precautions to prevent drift, especially from herbicides, when spraying on nearby properties. Information in the statewide map is voluntarily provided by growers of the sensitive crops.

During FY 2013, MDA's **Pesticide Container Recycling Program** collected and recycled 42,242 pesticide containers weighing 36,500 pounds from growers and commercial pesticide applicators at 22 locations in seven counties and at 13 pesticide dealer/custom applicators sites.



## STATE CHEMIST

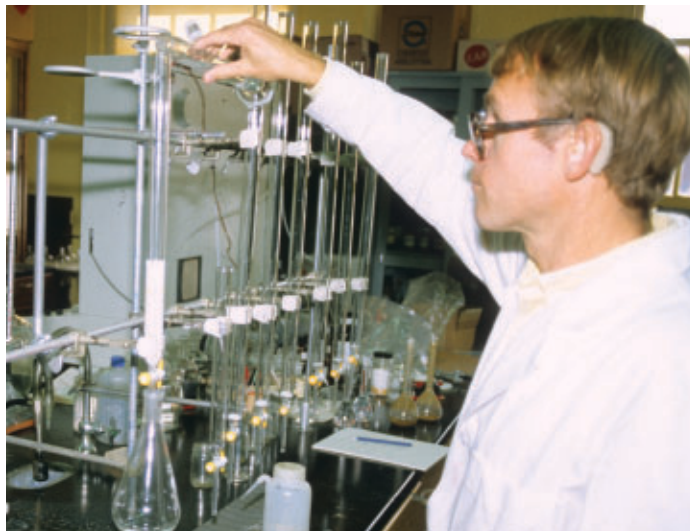
The state chemist protect consumers and the environment from unsafe and ineffective products by conducting laboratory analyses on pesticides, feeds, pet foods, fertilizers, compost, soil conditioners and agricultural liming materials.

### During FY 2013, MDA:

- Registered 12,073 pesticide products; 3,620 fertilizers; 465 soil conditioners; 698 fertilizer/pesticide mixtures; 157 liming materials; and 15,138 commercial feeds. MDA inspectors also brought 324 previously unregistered products into compliance.
- Performed 963 on-site inspections.
- Began establishing a laboratory to screen pet food and animal feed for pathogens, which are not only a danger to pets but also to home owners who often handle and dispense pet food within and near the kitchen area.



**The Lawn Fertilizer Act**, which passed during the 2011 Legislative Session, requires lawn fertilizers sold and used in Maryland to contain reduced levels of phosphorous. As a result, the State Chemist has put increased emphasis on reviewing and monitoring the labeling, registration and analysis of fertilizers containing phosphorous. Six Stop Sale Orders were issued during FY 2013 for turf/lawn fertilizers with unacceptable phosphorous levels.



## STATE CHEMIST REGULATORY ACTIONS IN FY 2013

Stop Sales - Active Ingredient Deficiencies	
Pesticides	0
Fertilizers	72
Feeds	47
Stop Sales - Active Ingredient Over Formulations	
Pesticides	0
Fertilizers	9
Feeds	7
Stop Sales - Mycotoxins in Feeds	0
Stop Sales - Label Violations	5





## 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.

**100<sup>th</sup> Anniversary of the Maryland Seed Law:** On October 1, 1912, the Maryland State Seed Law was enacted. The Turf and Seed section celebrated 100 years of quality seed testing and service to Maryland's agricultural industry during FY 2013.

The Association of Official Seed Analysts (AOSA) maintains an accreditation program for seed analysts in official laboratories throughout the United States. Analysts who pass rigorous tests, which include both written and practical examinations, are certified as official purity and germination analysts. Currently, all six MDA seed analysts are certified by AOSA in both purity and germination testing.

**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 2013

FIELD INSPECTIONS	
Acres of Turf Inspected	5,895
Acres of Crop Seed Inspected	13,534

SUPERVISED MIXING	
Pounds of Seed Mixed (thousands)	2,086

RETAIL AND WHOLESALE SEED INSPECTIONS	
Number of Lots Sampled	1,053
Number of Regulatory Seed Tests Conducted	2,941

SEED TESTING	
Purity Service Tests Conducted	2,902
Germination Service Tests Conducted	4,121





## OFFICE OF RESOURCE CONSERVATION



*MDA's Office of Resource Conservation helps Maryland farmers implement conservation practices that balance crop and livestock production with natural resource protection.*

### STATE SOIL CONSERVATION COMMITTEE

The State Soil Conservation Committee (SSCC), established in 1938, coordinates the activities of Maryland's 24 soil conservation districts and appoints Soil Conservation District supervisors. SSCC also develops, reviews and refines policies on soil conservation and water quality issues, while advising the Agriculture Secretary on these matters. Importantly, the committee serves as a forum for all agencies involved in protecting natural resources.

### 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.

**Geographic Information Systems** links a vast amount of information to a geographic location. In FY 2013, staff continued to provide technical assistance and spatial data to a range of program areas within MDA. A new priority watershed map was developed for the MDA's website to help soil conservation districts determine whether farms are eligible for cover crop bonus payments.

**The Information and Education Program** provided creative, editorial, graphics and production services to program areas within the Office of Resource Conservation. During FY 2013, the program worked closely with the University of Maryland Extension to develop educational materials for homeowners and lawn care professionals about Maryland's new lawn fertilizer law, including an 84-page training manual. The program also maintains a dedicated web page on the MDA website about the new law.



## CONSERVATION GRANTS

The Maryland Agricultural Water Quality Cost-Share (MACS) Program helps farmers install water quality improvement projects on their farms, adopt sustainable agricultural practices and comply with a growing list of federal, state and local environmental requirements. In 2013, MACS raised its funding caps for conservation grants and Governor Martin O'Malley earmarked \$2 million in cost-share funds to help farmers comply with Maryland's newly revised nutrient management regulations.

### During FY 2013, MACS:

- Provided Maryland farmers with \$26.3 million in grants – the largest annual funding allocation in the program's 29-year history;
- Grants helped farmers install 2,433 conservation projects that will prevent an estimated 2.6 million pounds of nitrogen and 109,000 pounds of phosphorus from entering Maryland waterways and an estimated 16,703 tons of soil from impacting local streams.



- Provided farmers with \$104,334 in Low Interest Loans for Agricultural Conservation (LILAC) to help pay for manure handling and conservation equipment.

**MACS Projects Financed with Special Funds:** The following practices are financed with funds from the Chesapeake Bay Restoration Fund, Chesapeake Bay 2010 Trust Fund and a combination of general and private funds.

- **Cover Crop Program:** During the 2012-2013 planting season, MACS provided farmers with \$20.8 million in grants to plant 415,000 acres of cover crops that helped prevent 2.5 million pounds of nitrogen and 83,000 pounds of phosphorus from reaching the Bay and its tributaries.
- **Manure Transport Program:** In FY 2013, Maryland farmers transported 52,481 tons of manure to approved farms and businesses using \$377,007 in state grants. More than 90 percent of this tonnage was shipped to alternative use facilities and not land applied in the watershed. Delmarva poultry companies provided matching funds to transport poultry litter, bringing the total amount of financial support to \$716,260.
- **The Maryland Conservation Reserve Enhancement Program,** a federal-state partnership, pays landowners to take environmentally sensitive cropland out of production for 10 to 15 years and install conservation practices that protect water quality and provide wildlife habitat. In FY 2013, MACS provided 113 landowners with \$429,911 in cost-share funds to install stream protection measures and \$436,138 in signing bonuses.
- **The Manure Injection and Incorporation Program** was initiated in FY 2013 to help farmers comply with Maryland's new nutrient management regulations. Funded by the Chesapeake Bay 2010 Trust Fund, farmers used the funds to inject or incorporate manure, sludge, food waste and other organic products into the soil within 48 hours of application.

**Chesapeake Bay Milestones:** MACS plays a key role in helping farmers meet short-term Bay restoration goals called milestones as well as long-term restoration actions outlined in Maryland's Watershed Implementation Plan (WIP), the federally mandated document that serves as a road map for restoring a healthy Chesapeake Bay.



# CHESAPEAKE BAY MILESTONES

*2-Year Milestone Progress—July 2011 through June 2013\**

MILESTONE	GOAL	STATUS AS OF JUNE 30, 2013	% OF MILESTONE ACHIEVED
Barnyard Runoff Control Systems	Construct 153 barnyard runoff control systems by 2013.	211 systems installed	138%
Cover Crops	Plant 355,000 acres annually.	415,437 acres planted during 2012-2013 planting season	117%
Manure Transport	Annually transport 37,000 tons of excess poultry litter or livestock manure to farms or alternative use facilities that can use the product safely and in accordance with nutrient management plans.	52,481 tons of manure transported in 2013	142%
Retirement of Highly Erodible Land	Retire 608 acres of highly erodible land by 2013.	2,445 acres retired and planted with protective vegetation	402%
Streamside Forest Buffers	Plant 221 acres of forest buffers next to streams by 2013.	578 acres planted	260%
Streamside Grass Buffers	Plant 538 acres of grassed buffers next to streams by 2013.	2,165 acres planted	400%
Waste Storage Structures/Livestock	Construct 34 livestock waste storage structures by 2013.	127 structures installed	373%
Waste Storage Structures/Poultry	Construct 7 poultry waste storage structures by 2013.	25 structures installed	357%

**\*In some instances progress includes practices installed with funds from both MACS and USDA's Natural Resources Conservation Service.**



## RESOURCE CONSERVATION OPERATIONS

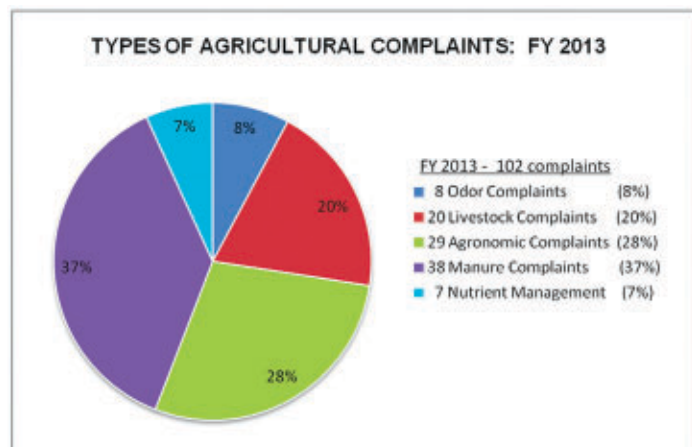
Resource Conservation Operations provides operating funds and staffing support to the state's 24 soil conservation districts to promote and deliver local soil conservation and water quality programs.

### Technical Assistance

#### During FY 2013, MDA:

- Funded 78 positions in soil conservation districts. With grant support from the 2010 Chesapeake Bay Trust Fund, an additional 39 field technicians and planners were hired to work with farmers to install best management practices.
- Worked with farmers to develop soil conservation and water quality plans (SCWQPs) to protect 29,785 acres of Maryland farmland. Overall, 911,237 acres of agricultural land were managed under a current SCWQP, a figure that exceeds Maryland's two-year milestone commitment of 826,000 acres.

**Enforcement:** In FY 2013, MDA received 102 complaints concerning agronomic issues, odors, manure, nutrient management, and livestock concerns; 95 of these complaints were corrected or closed and seven complaints are pending. Six enforcement actions were initiated during the year.



**The Maryland Nutrient Trading Program**, launched in 2010, helps farmers and landowners generate tradable nitrogen, phosphorus and sediment credits that can be sold in the private

sector. The website, [www.mdnutrienttrading.com](http://www.mdnutrienttrading.com), contains a credit calculator, a central registry, and a marketplace to help potential participants determine baseline compliance. To date, more than 200 farms—representing about 2 percent of Maryland's total agricultural acreage—have been evaluated using the calculation tool. About 60 percent of these farms have the capability to meet program requirements and could be eligible to trade.

## NUTRIENT MANAGEMENT PROGRAM

All farmers grossing \$2,500 a year or more or livestock producers with 8,000 pounds or more of live animal weight are required to follow nutrient management plans when fertilizing crops and managing animal waste. These science-based plans specify how much fertilizer, manure or other nutrient sources may be safely applied to individual crop fields to support crop growth while preventing excess nutrients from contaminating waterways. Nutrient management plans are required for all agricultural land used to produce plants, food, feed, fiber, animals or other agricultural products. During FY 2013, MDA's revised nutrient management regulations became effective. These regulations modify how a farm's nutrient management plan is developed and implemented, change the way organic nutrient sources are managed, and require farmers to install stream protection practices.

#### During FY 2013, MDA:

- Received initial nutrient management plans from 99.9 percent of the state's 5,382 regulated farms and initiated progressive enforcement actions against 27 operators.
- Issued warning notices to 1,417 farmers who failed to file their Annual Implementation Reports (AIRs) by March 1, followed by 376 notices of pending fines and 153 default notices. By the end of the fiscal year, 98 percent of regulated farmers managing about 1.2 million acres of land had submitted their AIRs. In FY 2013, MDA collected \$6,750 in fines for late or missing AIRs.
- Conducted 738 on-farm audits, representing 14 percent of regulated farms. Specialists issued 189 warnings to correct major violations; 37 percent of these operators came into compliance with the remaining operators progressing through the enforcement process. In FY 2013, MDA collected \$1,700 in fines from farmers who failed to take corrective actions in a timely manner.



- Certified 18 new consultants who passed the Nutrient Management Certification Exam, bringing the number of consultants to 1,187.
- Trained and certified 32 farmers to write their own nutrient management plans. To date, 488 farmers have been certified.
- Conducted 27 nutrient applicator voucher training sessions (with University of Maryland Extension) attended by 528 people seeking to obtain or renew their vouchers. Farmers who apply nutrients to 10 or more acres are required to attend training to obtain these vouchers.

**Urban Nutrient Management Program**

**Maryland’s Lawn Fertilizer Law:** In FY 2013, MDA’s urban nutrient management program spent a considerable amount of time and resources 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 (UM), to establish a training, certification and licensing program for lawn care professionals and to conduct a homeowner education program on Bay-friendly fertilizer practices.

**Enforcement:** MDA’s Urban Nutrient Management Program currently regulates 700 individuals and companies that apply fertilizer to 10 or more acres a year, a figure that will more than double when the law takes full effect. In FY 2013, MDA reviewed the records of 11 golf courses, 10 lawn and landscape companies, and one public lands maintenance office. The reviews resulted in two warnings for non-compliance. By the end of the fiscal year, eight follow up visits showed that all operations had come into compliance. MDA collected \$750 in fines.





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