

PESTICIDE ADVISORY COMMITTEE

2011 ANNUAL REPORT

MARYLAND DEPARTMENT OF AGRICULTURE



MARTIN O'MALLEY
Governor

Anthony G. Brown Lieutenant Governor

Earl F. Hance Secretary of Agriculture Mary Ellen Setting Deputy Secretary

January 2012

INTRODUCTION

The Maryland Pesticide Advisory Committee was established by Executive Order (01.01.2003.49) signed by Governor Robert L. Ehrlich, Jr. on November 17, 2003. The Committee comprises fifteen members. Seven are appointed by the Secretary of Agriculture, after consultation with the Governor's Office, representing public health, the environmental community, general public, pesticide industry, local government, pest control industry and the agricultural community. One member is a member of the Maryland Agricultural Commission, appointed by the Secretary of Agriculture. One member is appointed by the Senate President, one by the House Speaker, and one by the Chancellor of the University System of Maryland. Four serve ex officio and represent the Secretary of Agriculture, the Secretary of Natural Resources, the Secretary of the Department of the Environment, and the Secretary of the Department of Health and Mental Hygiene. The Secretary of Agriculture names the Chair.

Questions about the Committee can be directed to the Maryland Department of Agriculture or to the Chair. The Pesticide Advisory Committee provides a forum for the public and other interested parties to give input on pesticide regulatory issues and to advise the Secretary of Agriculture on matters relating to pesticides.

The committee meets bimonthly, normally on the fourth Wednesday of the month, in room 114 at the Maryland Department of Agriculture (MDA), 50 Harry S. Truman Parkway, Annapolis, Maryland. Meetings begin at 9:00 a.m. and adjourn at noon. The meetings are open to the public and the last 30 minutes of each meeting agenda is devoted to public input.

Mission

The primary mission of the Committee is to advise the Maryland Department of Agriculture, based on sound science, on the proper use, management and control of pesticides with particular emphasis on employing integrated pest management techniques.

Duties and responsibilities outlined specifically in the Executive Order (01.01.2003.49) Section D. (1) - (4) include:

- Making recommendations to the Secretary for changes in law or regulation to improve pesticide management in the State.
- Providing advice to the Secretary on issues concerning the registration, sales, use, storage and disposal of pesticides, certification and training of pesticide applicators, licensing of pest control businesses, and protecting farm workers, endangered species, and water resources.
- After consulting with the Secretary, providing advice to other state agencies and local governments concerning their responsibilities in pesticide" management and protection of human health, natural resources and the environment.
- Serving in an advisory capacity to the Secretary, department officials, and other state agencies on pesticide related matters.

Membership

The Committee consists of 15 members, 7 who are appointed by the Secretary after consultation with the Governor's Office. These 7 members have subject matter interest or expertise in pesticide use, pest control, public health or environmental protection. Eight members are specifically listed in the Executive Order:

- 1. The Secretary of the Department of Agriculture, or a designee.
- 2. The Secretary of the Department of Natural Resources (DNR), or a designee.
- 3. The Secretary of the Department of the Environment (MDE), or a designee.
- 4. The Secretary of the Department of Health and Mental Hygiene (DHMH), or a designee.
- 5. One representative of the University System of Maryland with expertise in pesticides, designated by the Chancellor.
- 6. One member of the Senate of Maryland, appointed by the President of the Senate.
- 7. One member of the House of Delegates, appointed by the Speaker of the House.
- 8. One member of the Maryland Agricultural Commission, selected by the Secretary of Agriculture.

The Secretary of Agriculture names the Chair. The seven members with expertise in pesticides and the member representing the Maryland Agricultural Commission serve at the pleasure of the Secretary of Agriculture. Members may not receive any compensation for their services, but may be reimbursed for reasonable expenses incurred in the performance of duties, in accordance with the Standard State Travel Regulations, and as provided in the state budget.

Procedures

The Maryland Department of Agriculture provides principal staff support to the Advisory Committee. Staff are responsible for scheduling and announcing the meetings, recording meeting minutes and distributing appropriate information to the Committee members.

The Committee may adopt procedures necessary to ensure the orderly transaction of business. A majority of the Advisory Committee constitutes a quorum.

Meetings

The Committee meets bimonthly on the fourth Wednesday of each month, beginning in January of each year. Proceedings start at 10:00 a.m. and are normally completed by noon. An agenda and the minutes of the last meeting are mailed to all Committee members prior to the meeting date. These packets may also include reference materials, articles, or regulatory materials that should be reviewed before the meeting date. In the event of inclement weather, the Committee follows the Anne Arundel County Public School System's school delay or cancellation schedule. If school is delayed by two hours or is cancelled, the Committee meeting is cancelled until the next scheduled date.

Prior to the end of each Advisory Committee meeting, a total of 30 minutes is set aside for members of the public, or other interested parties, to make a presentation to the Committee. Presentations are limited to a five-minute period or less, depending on the number of individuals that sign up to speak. When possible, a written statement should be submitted before the meeting and an abstract of the presentation should be given to the Committee at the meeting. It is suggested that members of the public provide scientific citations or studies referenced in their presentations or provide reprints of the study. Any Committee member who fails to maintain a 50 percent attendance of all meetings may forfeit their appointment to the Committee. By law, any appointed Committee member who fails to maintain an appropriate attendance record is considered to have resigned that position. The member may send an approved alternate to the meeting; however that person will not count for the member's attendance record, nor will they be permitted to vote. If the member is interested in remaining on the Committee and has had extenuating circumstances that prevented attendance of the meetings, a request may be made to excuse the absences and the dismissal from the Committee.

Reports

The Secretary of Agriculture is required to report annually to the Governor on the activities of the Committee.

2011 Activities and Accomplishments

- Committee was established as prescribed by Executive Order 01.01.2003.49. and currently has one vacant position.
- The Committee held six public meetings (January, March, May, July, September and November) during 2011. Each public meeting had at least a 30-minute period devoted to public comment. The May 25th meeting was held at the Chevy Chase Golf Club, in Chevy Chase, Maryland, where committee members learned about the various pest control issues facing golf courses. The committee members were also informed about integrated pest management procedures the golf course utilizes. Following a presentation by the head grounds keeper the committee members observed an actual pesticide application being made on the golf course.
- During these meetings, the Committee received briefings on the following subjects:
 - o An overview of the Maryland Draft National Pollution Discharge Elimination System (NPDES) Permit for Pesticides and the process for obtaining a permit. (Ed Gertler, MDE)
 - o Potential Impacts that Pesticide NPDES permits may have on State Pest Management Programs, such as Mosquito Control. (Mike Cantwell, MDA)
 - o Proposed legislation introduced during the 2011 Session of the General Assembly. (Dennis Howard, MDA)
 - o Proposed Symposium on Biomonitoring in Maryland. (Dr. Clifford Mitchell, DHMH).
 - o Discussion of concerns regarding the sale of unregistered, illegal and potentially harmful pesticide products over the internet. (Dennis Howard, MDA)
 - o An overview of the cooperative (EPA, USDA and state) efforts to find effective pest control measures to control the brown marmorated stink bug, an invasive species that has been causing economical damage to crops in the U.S. and Maryland. (Dennis Howard, MDA)
 - o An overview and report on pesticides and the Little Blackwater River Watershed

- Water Quality Project (partially funded by MDA). (Brandon Flemming, USGS)
- o An update and presentation on MDA's emerald ash borer quarantine and control programs. (Kim Rice, MDA)
- o An overview and discussion of MDA's proposed Pesticide Usage Survey for 2011. Surveys to be mailed to pesticide applicators in January 2012 and publication of survey results in 2013. (Barbara Rater and Doug Boline, USDA, National Agricultural Statistics Service (NASS))
- o Overview and update on efforts to control the invasive brown marmorated stink bugs.(Bryan Butler, Senior Agent, University of Maryland Extension)
- o Unwanted Pesticide Disposal Program. (Rob Hofstetter, MDA)
- o Updates on Federal (EPA) regulatory actions and activity related to pesticides. (Dennis Howard, MDA)
- o Maryland Pesticide Regulation Section Program Updates licensing, applicator certification, enforcement, worker protection, groundwater protection, plastic pesticide container recycling. (Dennis Howard, MDA)
- o Input from members of the public.
- At each meeting, a portion of the agenda is devoted to comments from the public. The Committee views public participation in our meetings as a critical factor to success of accomplishing our mission. In many cases, comments are communicated to both state and federal regulatory authorities via direct and scientific means. Members of the Maryland Department of Agriculture attend regular meetings with federal and other state pesticide regulatory officials and report the proceedings of the Committee. In addition, the results of the deliberations of the Committee are reported through scientific means, such as technical journals and meetings. Public comments are important to the Committee and are considered in various regulatory venues. Periodically, public comments are reviewed to insure that appropriate attention has been paid to them. In order to facilitate communication with the Committee, a guidance document suggesting means of effective interchanges with the Committee has been adopted (Attachment 1).

• Comments/recommendation from members of the public included:

- o Expressed disappointment concerning the late notice of the March Meeting (Notice was delayed due to a change in speakers).
- o A member of the Chemical Sensitivity Disorder Association expressed concern regarding a Tick-borne Disease Study that DHMH was conducting. Their concern regarded their difficulty in finding out which insecticide DHMH was proposing to use in this study.
- Expressed appreciation for providing gypsy moth control program information out in a timely manner.
- o Recommendation that committee have more environmental representatives.
- o Concern regarding a statement in a newspaper article on Mosquito Control spraying in the Laurel, Maryland area. The concern was that a City of Laurel employee apparently was quoted as saying "don't worry, it won't hurt you."
- o Recommendation that someone from MDA attend a meeting (Oct. 14, 2011) of the Pediatrics Environmental Specialty Health Units, being held in Philadelphia, PA.
- o A member of the Chemical Sensitivity Disorder Association expressed concern regarding potential spray drift from gypsy moth spray applied by helicopters.
- o Concern about revisions to Suggestions for Public Participation at Meetings of the Maryland Pesticide Advisory Committee.
- Minutes from each meeting describing presentations and discussions are publicly available upon request to MDA.

Recommendations/Actions

The Pesticide Advisory Committee regularly comments or asks question of the guest presenters during each meeting. From time to time, specific recommendations are made by the Committee to the Department. During 2009, Committee recommendations included:

- <u>Pesticide and Nutrient Survey</u> There was concurrence by the Committee to support MDA's efforts to conduct a pesticide and nutrient survey. The Committee on several occasions has endorsed the gather of data in these areas and was pleased to note that this survey was planned. The committee was also particularly supportive of MDA's working with USDA's National Agricultural Statistics Service (NASS) to conduct this survey.
- Brown marmorated stink bug The Committee applauded all of the effort being made by State and Federal agencies of better understand and predict the biology and control of this invasive pest. The Committee was also please that the research was oriented towards Integrated Pest Management (IPM) approaches. IPM approaches are imperative since present control methods focus on pesticide use.
- <u>Suggestions for Public Participation at Meetings of the Maryland Pesticide Advisory</u>
 <u>Committee</u> The Committee is considering revisions to the above referenced document
 (Attachment 1). This matter will be taken up during 2012 Committee meetings.
- <u>Committee Membership</u> In 2011, several Committee members have resigned from the Committee. As a result, six new members have been appointed to the Committee.

ATTACHMENT 1

SUGGESTIONS FOR PUBLIC PARTICIPATION AT MEETINGS OF THE MARYLAND PESTICIDE ADVISORY COMMITTEE

WELCOME!

The Maryland Pesticide Advisory Committee is delighted that you are attending our meeting and that you wish to participate by making either verbal or written comments. Our meetings are open to the public, and a portion of each meeting is devoted to public input. Please remember that meeting minutes and reports of committee activities always are available to the public; minutes do include summaries of the public participation segment of our meetings.

The Maryland Pesticide Advisory Committee was established by Executive Order (01.01.2003.49) signed by Governor Robert L. Ehrlich, Jr. on November 17, 2003. The mission of the committee is to advise, based on sound science, the Maryland Department of Agriculture and other State agencies on the policies governing proper use, management and control of pesticides with particular emphasis on employing integrated pest management techniques.

The purpose of this brief article is to facilitate your communication with the Committee. Since public comments are usually held to five minutes, it is important that your presentation be as clear and concise as possible. It is critical that your remarks be current relevant. The Committee can do little if the issues or events that you report are several years old. In most cases, Committee members will ask questions or make comments about your presentation, and this time is in addition to your allotted period of five minutes. Written comments also are welcome and may conserve some of your allotted time. Written comments become part of the permanent record of the Committee. If time permits, questions from the audience may be entertained after each agenda presentation, but audience participation always follows questions and comments from Committee members.

Committee comments and recommendations are communicated to both State and Federal regulatory authorities via direct and scientific means. Members of the Maryland Department of Agriculture attend regular meetings with Federal and other State pesticide regulatory officials and report on the proceedings of the Committee. In addition, the results of the deliberations of the Committee are reported through scientific means, such as technical journals and meetings. Your comments are important to the Committee and are considered in various regulatory and scientific venues.

Much of the Committee's proceedings involve complex scientific issues. This should be expected as the Committee's Charter clearly states that our advice should be based on sound science. Most members have some graduate education with five members holding doctoral-level degrees. Several members also hold State certifications as crop advisors and pesticide applicators. If members of the audience have questions regarding the understanding of scientific concepts, it probably would be prudent for them to contact the speaker for an explanation at breaks or after the meeting. Most of the speakers welcome comments on their work from the general public.

Another area of science that is important to Committee members is the quality of technical references used to support some of the statements made during public participation. It is difficult for scientists to interpret technical findings that are not from refereed scientific journals or have not been subjected to peer review. Peer and referee reviews are integral components of accepted scientific methods. In some cases it is problematic for lay people to establish whether their references have undergone the above scrutiny. At a minimum, the source of the information needs to be identified.

In many cases, comments made during the public participation segment of the agenda involve health or environmental effects of pesticides. Committee members are interested in these findings, if they are from sources of known scientific quality. The Committee, of course, is advisory in nature and has no pesticide regulatory authority. All pesticides are regulated under Federal laws and regulations by the United States Environmental Protection Agency. In order to have your comments and opinions included in appropriate regulatory dockets and recognized by the proper authorities, you might consider sending them to the following:

Director
Office of Pesticide Programs
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave.
NW Washington, D.C.
20460
E-mail: opp-web-comments@epa.gov

Thanks again for your participation! We hope that this brief article has been informative and assisted in your communications with the Committee.

April 1, 2007 (revised)

Current Committee Members

Chair of the Committee Frederick (Rick) W. Kutz, Ph.D.

Dr. Rick Kutz is a staff member of the Geospatial Research and Education Laboratory in the Department of Geography and Environmental Planning at Towson University. He also has a private consulting practice in environmental sciences, specializing in public health and environmental research, monitoring and assessment. He is currently a member of the Editorial Advisory Committee, *Environmental Monitoring and Assessment* and serves as a volunteer on the Scientific and Technical Advisory Committee, Maryland Coastal Bays National Estuary Program. He has worked in various capacities for the U. S. Environmental Protection Agency (EPA) from 1972 to 2002, including most recently as a Senior Environmental Scientist, National Exposure Research Lab at Fort Meade, Maryland, a Regional Scientist, EPA Region III, and as the Special Assistant to the Assistant Adm inistrator for Research and Development. Dr. Kutz is a member of the following professional associations: Entomological Society of America, American Mosquito Control Association, and the American Society of Tropical Medicine and Hygiene.

Dr. Kutz earned his Ph.D. degree in entomology, with minors in ecology and animal physiology from Purdue University, West Lafayette, Indiana, a Master's degree in medical entomology and parasitology and Bachelor's degree in entomology from the University of Delaware, Newark, Delaware. His research interests include the use of geospatial and landscape approaches to public health and environmental issues. He has published a number of articles generally pertaining to insect pests, pesticide residues in human populations, and public health and ecological research.

Thomas Pheiffer

Thomas Pheiffer earned a BS in Agronomy and an MA in Education. With over 35 years of experience in water resources management, Mr. Pheiffer was the National Environmental Services Officer overseeing the 10 Regional Offices of The Environmental Protection Agency. He was instrumental in the biological assessment of streams in the Mid Atlantic Region thus working with Maryland, Pennsylvania, Virginia and Delaware. Soils, weed science, water quality, ground water and land use characterization are within his areas of expertise.

T. Mark Fuchs

T. Mark Fuchs is employed as a Senior Agronomist for Southern States Cooperative, initially going to work for Southern States in 1978. He is a certified crop advisor and certified pesticide applicator. He has served as past Chairman of the Mid-Atlantic Certified Crop Advisor Board and as a member of the Governor's Pesticide Council. Mr. Fuchs is currently a board member of the Delaware Maryland Agricultural Business Association. He earned a Bachelor of Science degree in Dairy Science, minoring in Agronomy, from the University of Maryland.

Mark R. Hardin

Mr. Hardin is an Integrated Pest Management (IPM) Specialist for the Howard County Public School System. He was an entomologist and IPM coordinator for the Horticulture Division of the Smithsonian Institution for 12 years where he worked in all areas of pest management from protection of artifacts to plant and turf pest control. He has also had experience in a wide range of pest control projects including mosquito abatement, landscape IPM, urban pest management, and gypsy moth quarantine programs.

He is a current member of the Entomological Society of America, the Phi Kappa Phi Honor Society and was one of the founders the Landscape IPM Educators and Professionals. He was a PhD candidate (all but dissertation) in the Department of Entomology at the University of Maryland College Park, earned his Master's degree in Entomology and Applied Ecology at the University of Delaware and a Bachelors degree in Biology and Secondary Teaching Certification in Biology while at James Madison University, Harrisonburg, Virginia. He is a frequent speaker on IPM topics at pesticide re-certification conferences and professional meetings and has coauthored numerous scientific publications on entomology, and IPM.

Wendy Klein-Schwartz, Pharm. D., M.P.H.

Wendy Klein-Schwartz is the Coordinator of Research and Education at the Maryland Poison Center and Associate Professor, Department of Pharmacy Practice and Science, University of Maryland School of Pharmacy. She has authored numerous publications in refereed journals and book chapters relating to poisoning, poison prevention, and prescription drug overdoses. Dr. Klein-Schwartz is a member of the Toxicology and Poison Control Panel of the *Annals of Pharmacotherapy* and serves as referee for emergency medicine and pharmacy journals. She is active in the American Association of Poison Control Centers (AAPCC) serving as chairman of the Research Awards Committee as well as member of the Tricky Coding subcommittee of the Data Collection Committee. She represents AAPCC on the AAPCC/Micromedex Coding Advisory Group. She earned a Doctor of Pharmacy at the University of Maryland School of Pharmacy and a Master of Public Health from the Johns Hopkins University School of Hygiene and Public Health.

Richard D. Kramer, Ph.D., LtC. (Ret. US Army)

Richard D. Kramer, Ph.D., is the President of Innovative Pest Management, Inc., a full service pest management company located in Brookeville, MD. He served in the US Army for 22 years as a medical entomologist. After retirement he was the Technical Director for the National Pest Management Association for five years and spent the following two years as an industry consultant. Prior to starting his own company with his son, Josh, in January 2005, he was the Director of Technical Services for American Pest Management in Takoma Park, MD for seven years. In addition to providing integrated pest management services, the company provides consulting services, e.g., expert witness, training, technical writing and presentations, quality assurance, pest identification, etc., to other pest management companies, private and government agencies.

He rewrote the third edition of PCT's *Technician's Handbook - A Guide to Insect Identification and Management*. He authored PCT's *Bird Management Field Guide*, PCT's *Technician's Handbook - A Field Guide to Turf and Ornamental Insect Identification and Management*, the IPM chapter in the 9th edition of the *Mallis Handbook of Pest Control*, the Bird Control Manual and the Wildlife Control Manual for the Maryland Department of Agriculture. Dr. Kramer also serves as the contributing Technical Editor and columnist for *Pest Control Technology* magazine.

Dr. Kramer received his BS in Agriculture (1969), MS (1975) in veterinary entomology, and his Ph.D. in urban entomology (1987) from the University of Florida. He is a member of the Entomological Society of America and a Board Certified Entomologist in Urban and General Entomology. He has resided in Maryland for the past 18 years. He is a member, past president, and director of the Maryland State Pest Control Association.

Carol Holko Maryland Department of Agriculture Representative

Carol Holko has been designated by the Secretary of Agriculture to represent him on the Pesticide Advisory Committee. Mrs. Holko is the Assistant Secretary for the Office of Plant Industries and Pest Management. She has been employed by the Maryland Department of Agriculture since 1982 and has served as the Program Manager for the Plant Protection and Weed Management Section and has supervised beneficial insect rearing, biocontrol and IPM programs, and supervised Laboratory Services for the Section. Mrs. Holko has a Bachelor of Science degree in Entomology from Michigan State University. Mrs. Holko is the Maryland representative to the National Plant Board and Eastern Plant Board, and is a founding member of the Maryland Invasive Species Council.

Donald Vanhassent Maryland Department of Natural Resources Representative

Donald VanHassent is the Secretary of Natural Resources' designee to the Pesticide Advisory Committee. Mr. VanHassent is the Associate Director of Statewide Programs for the Maryland Forest Service. He oversees the Forest Stewardship, Fire Management, Urban and Community Forestry and Watershed Forestry Programs. He has been with the Department of Natural Resources - Forest Service for 29 years, working his way up from field forester to several program managers to his current position where he has been for the past seven years. He has a Bachelor of Science degree in Forest Utilization from the University of Maine. He is an active member of the Society of American Foresters and a past chairman of the Maryland/Delaware Division of SAF.

Jed Miller, M.D. Maryland Department of the Environment Representative

Jed L. Miller, M.D., M.P.H., is an Environmental Health Advisor in the Science Services Administration of the Maryland Department of the Environment (MDE). His responsibilities at MDE include environmental health consulting and coordination for Departmental and interagency issues. He co-chairs the Environmental Health Liaison Committee and is Vice Chair of the Maryland Children's Environmental Health and Protection Advisory Council. Dr. Miller was in private practice as a general pediatrician for five years prior to joining MDE in 2009. He received his undergraduate degree from the University of Pittsburgh, medical degree from the University of California, Los Angeles School of Medicine, residency training in pediatrics at the University of Virginia Medical Center, and Master of Public Health degree from the Johns Hopkins Bloomberg School of Public Health.

Clifford Mitchell, M.D., M.P.H. Department of Health and Mental Hygiene Representative

Clifford S. Mitchell, MS, MD, MPH, is the Assistant Director for Environmental Health and Food Protection, in the Infectious Disease and Health Administration of the Maryland Department of Health and Mental Hygiene (DHMH). His responsibilities include: food protection and regulation; regulation of medical waste, tanning, indoor smoking, and hazards in consumer products; surveillance of environmental and occupational health events; and public health responses to environmental exposures. He has been at DHMH since 2006; prior to that he was an associate professor in environmental health sciences at the Johns Hopkins Bloomberg School of Public Health. Dr. Mitchell received his B.A. in Chemistry from Williams College, a Masters in Science from the Mass. Institute of Technology, his M.D. degree from Case Western Reserve University, and his Masters in Public Health from the Johns Hopkins School of Hygiene and Public Health. He is board certified in internal medicine and preventive (occupational) medicine. He has published in the areas of occupational disease surveillance and occupational medicine, professional training, indoor air quality, and preparedness. Dr. Mitchell chairs the Maryland Children's Environmental Health and Protection Advisory Council, and co-chairs the Environmental Health Liaison Committee

David Myers University of Maryland Representative

David Myers has been appointed by the Chancellor of the University System of Maryland as a representative to the Pesticide Advisory Committee. Mr. Myers is a Senior Agent and County Extension Director. He has been a lifelong resident of Anne Arundel County, and currently is the agricultural Extension Educator for both Anne Arundel and Prince George's Counties. Prior to assuming the University of Maryland Extension position in December 1997 Dave was the agronomist for the U.S. Naval Academy Dairy Farm, where he was employed from 1980 to 1997. While working at the Naval Academy Dairy, Dave earned in 1983 a BS degree in Agronomy, Crop Science and in 1996 a MS degree in Agronomy, Weed Science from the University of Maryland. His Extension responsibilities include all field crop and livestock agriculture with an emphasis on fruit and vegetable production and marketing. Dave currently conducts fruit and vegetable research trials at the University of Maryland Upper Marlboro Research and Education Center. His areas of expertise: Fruits, Agronomy Weed Science, IPM, Forages, Vegetables, Field Crops and Livestock.

Henry Schmidt Maryland Agricultural Commission Representative

Henry Schmidt is the current Agri Business representative on the Maryland Ag Commission and was appointed as the Maryland Ag Commission representative on the Pesticide Advisory Council. He is a Lifelong Farmer, Sales representative for Armour Chemical and W.R. Grace and spent fifteen years as the Sales Manager for Lebanon Chemical and spent eight years in Management for Southern States Agri Business Management.

Senator Lowell J.B. Jennings Senate Representative

Senator Republican, District 7, Baltimore and Harford Counties. First elected to the Senate in 2010. Member of the Senate since 2011. Member, Education, Health and Environmental Affairs Committee (Environment Subcommittee, Health Occupations Subcommittee). Member, Joint Advisory Committee on Legislative Data Systems.

Member of the House of Delegates, 2003–2011. Born in Baltimore, Maryland, March 27, 1974. Essex Community College, A.A., 1995. University of Baltimore, B.S. (Business Administration), 1997. Dairy Farmer, Owner, Cedar Side Farm, 1992–; Co-Owner and President, The Mill of Hereford, Inc., (feed store).

Delegate Charles J. Otto House of Delegates Representative

Delegate Otto represents District 38A, Somerset and Wicomico Counties. First elected to the Maryland House of Delegates in 2010. Member of the House since 2011. Member, Environmental Matters Committee (Agriculture, Agriculture Preservation and Open Space Subcommittee; Natural Resources Subcommittee). Chair, Somerset County House Delegation. Born February 15, 1964 in Salisbury, Maryland. Washington High School, 1982; University of Maryland, Eastern Shore; Virginia Tech, B. S., Animal Science, 1986. Farmer, certified crop advisor, and crop production sales.