

# AGRICULTURAL CONSERVATION NEWS

A PUBLICATION OF THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT

410-666-1188, EXTENSION 3

EDITOR: GERALD F. TALBERT

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## ROTATIONAL GRAZING AROUND THE BAY

**M**anaging grass-based dairy and beef operations is becoming popular and profitable in the Mid-Atlantic region. A grass-based animal operation requires less equipment and facilities, grain feed, fertilizer, chemicals, labor, vet care and fuel than the traditional method. In dairy operations, the grass-based cows may produce less milk per animal on average, but since healthy pastures are producing most of the food, expenses are significantly less, the animals tend to be healthier and produce longer and the operation is more profitable. Compared to conventional confinement operations, grass-based farming doesn't require structures such as silos, barns and animal waste management facilities and far less need for tractors and harvestors.

Rotational grazing and good pasture management are essential to a successful grass-based operation. Creating a series of paddocks with electric fencing and moving herds often before overgrazing occurs keeps pastures in good shape. Through careful management, the optimum time spent in any one paddock provides healthy forage for the animals and they are moved to the next paddock when the grasses can rebound and also benefit from a natural distribution of manure. The animals are both harvesting their food and spreading organic fertilizer themselves with a good nutrient balance for plant growth and soil health. Research at Virginia Tech indicates that 90 percent of



### Four Steps to Rotational Grazing

- Determine the number of animal units that will be in the grazing system. What are the total forage requirements of your herd?
- Estimate how many acres will be needed throughout the grazing system. Acreage depends on feed requirements and available forage produced.
- Estimate how large each paddock should be. Paddock size depends on total animal units, available pasture and desired grazing period.
- Estimate the number of paddocks needed. The number of paddocks depends on the number of days the animals graze in a paddock and the maximum summer rest period needed for pasture growth rate and weather conditions.

the nutrients consumed by livestock in rotational grazing are recycled as manure and urine directly to the pasture. Earthworm populations average 1.2 million per acre compared to 400,000 per acre in a tilled field.

Healthy pastures also provide excellent erosion and sediment control and improve water quality. Surveys show that there are several thousand small beef and dairy operations in Maryland that could benefit from converting to a grass-based operation which would also be a benefit to the Chesapeake Bay and its tributaries.

With the dramatic increase in the cost of fuel, corn, fertilizer and chemicals, converting to a grass-based operation is getting more attention. One of the reasons that it hasn't grown as quickly in the past is because it hasn't been promoted by the dealers and salesmen from whom farmers get much of their information because this significantly simplified system requires

far less equipment, structures, chemicals and fertilizer. There is also a need for more technical assistance to help farmers convert to a new system that calls for careful management. To help spread the word and provide technical assistance, the Chesapeake Bay Funders Network and the W.K. Kellogg Foundation have established the Maryland Grazers Network and funded it with a three year grant totaling \$425,000 to pay experienced farmers to serve as men-

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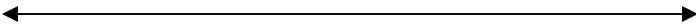


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tors to new-comers interested in establishing rotational grazing.

**If you're interested in finding a mentor, contact:**

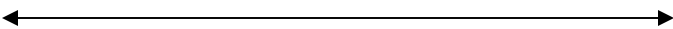
- Elmer Dengler, USDA-NRCS, [elmer.dengler@md.usda.gov](mailto:elmer.dengler@md.usda.gov) or 800 384-8770 x333; or,
- Michael Heller, Chesapeake Bay Foundation Manager of the Claggett Farm at [mheller@cbf.org](mailto:mheller@cbf.org). or 301 261-2350 .



### Maryland Agriculture Exchange

There's a new website marketplace where farmers and others can buy, sell or trade all manner of agricultural products, services and equipment at [www.agtrader.org](http://www.agtrader.org). It also maintains a directory of ag businesses and haulers and a listing of news and events.

The Maryland Agriculture Exchange was created by the Environmental Finance Center and the National Center for Smart Growth Research and Education, based at the University of Maryland, College Park. It intends to complement MDA's manure transport program and provide a free, user-friendly marketplace. All transactions are strictly between buyer and seller and participants can quickly register and then post anytime without filling out any forms.



### Save America's Ash Trees

The emerald ash borer is an exotic beetle that was discovered in southeastern Michigan near Detroit in the summer of 2002. The adult beetles nibble on ash foliage but cause little damage. The larvae (the immature stage) feed on the inner bark of ash trees, disrupting the tree's ability to transport water and nutrients. Emerald ash borer probably arrived in the United States on solid wood packing material carried in cargo ships or airplanes originating in its native Asia. Emerald ash borer is also established in Windsor, Ontario, was found in Ohio in 2003, northern Indiana in 2004, northern Illinois and Maryland in 2006, western Pennsylvania and West Virginia in 2007. Since then, the emerald ash borer has killed tens of millions of ash

trees and cost tens of millions of dollars of damage.

USDA has formed the National Ash Tree Seed Collection Initiative through the Natural Resources Conservation Service, the Agricultural Research Service, the Forest Service and other federal, state and local agencies to collect ash tree seeds for genetic preservation. If you can collect seeds from black, blue, green or white ash trees, call the USDA/NRCS Rose Lake Plant Materials Center at 517-641-6300 or visit [www.ashseed.org](http://www.ashseed.org).



### Technical Assistance Available for Horse Farm Management

The Maryland Department of Agriculture (MDA) has received a \$700,000 grant to help owners and operators of small-sized equine operations in Central Maryland (Baltimore, Harford, Howard, Carroll, & Frederick Counties) with pasture and manure management. The 2002 Maryland Equine Census found this region has among the largest concentrations of horses in Maryland.

“Small-sized horse operations often are outside the traditional agricultural outreach efforts and many of our financial assistance programs,” said Agriculture Secretary Roger Richardson. “The grant will help us bridge this information gap. We’ll be able to offer technical and financial assistance to horse owners who may not know how to tap into the expertise available with the goal of further protecting soil and water quality.” Soil Conservation Districts have knowledge and expertise to address

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pasture and manure management issues that are prevalent on horse operations.

The recreational segment of the state's horse industry is growing quickly. Local agriculture groups have identified a high priority need to address horse pasture and manure management as part of the Maryland Tributary Strategies. The three-year Chesapeake Targeted Watershed Grant from the National Fish and Wildlife Foundation and the Environmental Protection Agency along with matching funds will provide for two equine outreach specialists, funds for on-farm best management practice cost share, workshops, pasture walks and other education and technical assistance. Examples of best management practices include watering troughs, manure storage structures, sacrifice lots, pasture renovation/establishment, and roof runoff.

With more than 87,000 animals, the Maryland horse industry ranks second in livestock population behind poultry. Maryland has twice as many horses per square mile as Virginia, Texas, California, or Kentucky.

Partners in the project are the Maryland Department of Agriculture, the University of Maryland Cooperative Extension and Equine Studies Program, the Horse Outreach Workgroup, Maryland Department of the Environment, soil conservation districts, the Maryland Horse Industry Board and the U.S. Department of Agriculture's Natural Resources Conservation Service.

Contact the Baltimore Soil Conservation District for additional information.

Article provided by the Maryland Department of Agriculture.

### Baystat

Baystat is a powerful tool designed to assess, coordinate, target and evaluate Maryland's Chesapeake Bay restoration programs and to inform citizens on progress. Baystat monitors and measures progress and program effectiveness on Bay restoration work and adjusts efforts where needed.

Baystat was introduced by Governor O'Malley in 2007, based on Citistat, which he created to measure progress on Baltimore City programs when he was mayor. The Governor meets monthly with officials from the Maryland Departments of Agriculture, Environment, Natural Resources and Planning as well as scientists from the University of Maryland and other key advisors.

You can also monitor progress in improving conditions in the Bay by reviewing Baystat at <http://baystat.maryland.gov>. You'll find reports and maps that measure many factors of water quality in the Bay. Agricultural measures include cover crops, nutrient management, conservation plans, conservation tillage and other best management practices. You can also sign up for a monthly email newsletter on Baystat progress.

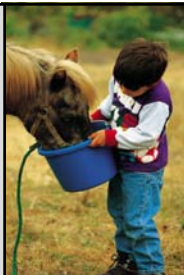
### DO YOU HAVE A SMALL FARM IN THE PRETTYBOY WATERSHED?

- Operate with 7 or less animal units (1 animal unit = 1,000 lbs.)?
- Want free technical assistance to develop a conservation plan for your property?
- Could use cost-share funds up to 87 1/2 % of the installation cost of conservation practices (up to a maximum of \$5,000 per farm if applicable)?

**Contact the District office at 410-666-1188, ext. 112 and make an appointment .**

*"...A true conservationist is a man who knows that the world is not given by his father but borrowed from his children..."*

*-- John James Audubon, 19th Century painter and naturalist*



### District Outreach

Speakers from the Baltimore County Soil Conservation District are available at no charge to give presentations on natural resource conservation programs in agricultural and urban areas. If your organization or school would like to hear about the ways that conservation practices can improve soil, water and air quality for any land use, contact the District office at 410-666-1188, extension 3 to request a speaking engagement.

**B**altimore County Soil Conservation District  
 9831 Van Buren Lane  
 Cockeysville, MD 21030  
 Phone: 410-666-1188; Fax: 410-666-0179  
<http://www.mascd.net/BCSCD>



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[essy.frey@md.nacdnet.net](mailto:essy.frey@md.nacdnet.net).

**BALTIMORE COUNTY SOIL CONSERVATION DISTRICT**

*A political subdivision of the State of Maryland, the Baltimore County Soil Conservation District was established in 1944. Its mission is to protect the natural resources of Baltimore County and assist landowners in implementing sound conservation measures. The District is managed by a Board of Supervisors, five appointed county residents who take an oath of office to serve their community. The staff is composed of federal, state and district employees.*

**BOARD OF SUPERVISORS**

- Charles Conklin—Chairman
- Thomas Reynolds—Vice Chairman
- Loring Sparks—Treasurer
- Vernon Foster
- Stephen Smith
- David Martin, Secretary, Cooperative Extension

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- Diana Gutierrez

**DISTRICT STAFF**

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- Essy Frey, Administrative Assistant

**AGRICULTURAL**

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- Ray Sufczynski, Soil Conservationist, NRCS
- Andy Thomas, Soil Conservation Eng. Tech., MDA
- Mike Scheffel, Planner/Outreach Specialist, SCD
- Jared Wagner, Soil Conservation Planner, MDA
- Serafina Rayner, Technician, MDA

**URBAN**

- Jeff West, Urban Conservationist
- Quintin Cornwell, Urban Conservationist
- David Bachman, Urban Conservationist

*All District services are offered on a nondiscriminatory basis, without regard to race, color, national origin, religion, sex, age, marital status, or handicap.*

**LET US KNOW IF WE CAN HELP YOU!**

The Maryland Agricultural Cost-Share Program (MACS) will pay up to 87.5% of the installation cost of these practices for qualifying landowners:

- Waste Storage       Grassed Waterway
- Riparian Buffer       Winter Cover Crop
- Diversion       Field Border
- Heavy Use Area Protection       Filter Strip
- Roof Runoff Mngt. System
- Sediment Basin       Stream Fencing
- Nutrient Mgt. Plan       Strip Cropping
- Spring Development       Stream Crossing
- Trough or Tank       Critical Area Planting

If you would like to see if you qualify or you'd like more information on these or other conservation practices, a conservation plan for your property or updating an old plan, mail or fax this form to us and we will contact you.

Name \_\_\_\_\_

Address \_\_\_\_\_  
 \_\_\_\_\_

Phone # \_\_\_\_\_

Fax to: 410-666-0179 or mail to:

Baltimore County Soil Conservation District  
 9831 Van Buren Lane  
 Cockeysville, MD 21030