Conservation Matters



June 2017

Howard Soil Conservation District 14735 Frederick Road Cooksville, MD 21723

410.313.0680

www.howardscd.org

CALENDAR

Maryland Envirothon June 15-16

Cover Crop Sign-Up June 21—July 17

Independence Day (Offices Closed) July 4

NCF Envirothon July 23-29

Howard County Fair August 5-12

Labor Day (Offices Closed) September 4

HSCD Cooperators' Dinner September 14

Farm Academy October 7

MDA Cover Crop Program

Cover crops are widely recognized as one of the most costeffective and environmentally sustainable ways for farmers to meet nutrient and sediment reduction targets outlined in Maryland's Watershed Implementation Plan to protect and restore the Chesapeake Bay by 2025.

In 2010, the U.S. Environmental Protection Agency established nutrient and sediment limits for the Chesapeake Bay known as the Total Maximum Daily Load (TMDL). Maryland and the other Bay jurisdictions are working to meet these pollution thresholds by implementing their Watershed Implementation Plans.

Cover crops are one of the most cost effective practices to help the State reach its Chesapeake Bay clean up goals.

The Maryland Department of Agriculture's Cover Crop Program provides grants to farmers who plant small grains such as wheat, rye or barley, or brassicas (plants in



the cabbage family) on their fields following the fall harvest. These grants help offset seed, labor and equipment costs associated with planting cover crops. In 2015, cover crop mixes containing legumes were introduced to

help create diversity and give farmers more planting options. As they grow, cover crops protect water quality by recycling unused plant nutrients remaining in the

soil from the preceding summer crop. Once established, cold-hardy cover crops work all winter to shield fields against erosion caused by wind, rain, snow and ice.

Farmers may sign-up for the 2017-18 Cover Crop Program June 21 through July 17. One big change for this

year's program is the elimination of the commodity portion of the program.

To find out more or to schedule a time to come in to the Howard SCD office to sign-up please call 410.313.0680.

MACS Funding Update

The Maryland Agricultural Water Quality Cost-Share Program or MACS for short, has been an important conservation tool for Maryland farmers since its inception in 1984. This Maryland Department of Agriculture (MDA) program provides conservation costshare grants to assist farmers with the installation of best management practices designed to protect our local streams and improve water

Unfortunately, funding for this important program was dramatically reduced by the General Assembly in fiscal year 2017, creating a shortfall in funding available to farmers. The Governor and the General Assembly restored the MACS funding for fiscal year 2018 (starting July I, 2017) at a funding level of \$8 million. Due to didn't get funded last year, the

quality in the Chesapeake Bay. bulk of this funding is already spoken for, leaving an estimated \$1.8 million available for projects this year. If you have been considering any conservation projects please do not hesitate to contact our office as soon as possible before this funding is gone. While there are other local and federal cost -share programs available, we want farmers to have the opthe demand from projects that tion to use MACS before the funding runs out.

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Envirothon

Envirothon is a hands-on, environmental resource based competition for high school students. Resource areas include aquatics, forestry, soils, wildlife and a current environmental issue. Students train throughout the school year, at field training days or in the school. Teams compete at their local Envirothon in the spring with the winning team from each County advancing to the Maryland Envirothon, held in June. there the winning team advances to the NCF Envirothon where they have an opportunity to test their knowledge and skills against the top teams from across the country and Canada. Along the way there are many learning opportunities, real world experiences - and of course prizes.

2017 NCF-Envirothon the annual final competition

Mount St. Mary's University Emmitsburg, MD

July 23 - 29, 2017

Envirothon In Your Backyard ...



This past fall a training day was held at the Howard County Conservancy Mount Pleasant Farm, but training opportunities don't stop there. Howard SCD has training kits, con-

Participants in the soils pit. taining tools, field guides and additional resources, for teams to borrow to support further learning and the strengthening of their skills. Additional training opportunities are available to teams as requested. Members of the winning team at our Howard County Envirothon receive a scholarship prize.

Congratulations to the winning team from Glenelg Country School!

To learn more about Envirothon visit www.envirothon.org or www.mdenvirothon.org . You may also contact Kristal McCormick, kmccormick@howardcountymd.gov , Howard County Envirothon Coordinator.

2017 Howard County Envirothon Sponsors

Air View Farm Marilyn & Allan Bandel Chanceland Farm, Inc **Chapel View Farm** Circle D Farm **Country Springs Wholesale Nursery** Gutschick, Little & Weber, PA **Howard County Conservancy Howard County Farm Bureau Howard Soil Conservation District Larriland Farm** Miller Land Company, Inc J. David Mullinix & Sons **Sun Nurseries** Walnut Springs Nursery, Inc Wellington Farm

Nesting Dickcissels

Nesting Dickcissels, a small grassland bird, are rare in Howard County. A colony of eight birds observed in courtship and nest building in a local field this spring, is only Howard's third documented attempt in fifty-five years. To protect the nesting effort, a partnership has formed between the farm family and the Howard County Bird Club, a chapter of the Maryland Ornithological Society. This cooperation has enabled the field to be idled for the nesting season which may include two nesting cycles.

With the continued loss of grasslands and improved pasture and haying techniques, vanishing nesting op-



Dickcissel (Spiza Americana)
Photo Credit: Anthony VanSchoor

portunities and nest failures have led to a marked decline in such grassland birds. Once a regular breeder along the eastern seaboard, the Dickcissel summer range has not quite fully retracted to the Great Plains. Regionally, some birds return each spring to sustain a few isolated nesting colonies and, in this case, attempt to create new ones.

Another impacted colony nester is the Grasshopper Sparrow, still found singing their insect like song atop grass seed heads in the western county. Better known and sporadically sustained locally only by released cage-reared birds, the Common Bobwhite is a species that has fully succumb to changes in management of its habitat. Efforts to restore grasslands have been incorporated into USDA programs such as the Conservation Reserve Program where selection of ground covers and mowing practices are managed to favor nesting grassland species.

Roadside Trees and Farm Equipment

Back in February, County Executive Allan Kittleman hosted an Agricultural Roundtable meeting at the Howard County Fairgrounds. One of the objectives of this meeting was to discuss things the County Government could do to assist Howard County farmers. Many issues were raised about deer populations, zoning regulations, and the agricultural preservation program. One item mentioned by several farmers was the problem they experience with low hanging branches over rural roads, and the difficulties this creates for moving equipment around. Low hanging branches not only damage expensive farm machinery, but they also create a traffic hazard when the operator has to move to the center of a road to avoid colliding with trees.

In an effort to begin addressing some of the conflicts between roadside trees and agricultural equipment, the Howard Soil Conservation District coordinated a meeting with personnel from Howard County's Bureau of Highways. Participating in this meeting were the Tree Care Super-

visor for the County and the Superintendent for the West Zone, which includes most of the roadside tree problems farmers experience. During these discussions, and through follow-up investigations, it became clear that part of the issue revolved around commercial vehicle height restrictions in State regulations. Howard County bases their tree trimming guidelines off of the commercial vehicle height restriction of 13'6". But they were not aware that state regulations provide an exception to this height restriction for farm equipment, allowing agricultural



Hay stack wagon travels down a Howard County road.

equipment to extend up to 16 feet in height. This was a revelation for everyone involved, and presents a great opportunity for resolving these conflicts in the future.

The Bureau of Highways is evaluating how they can adapt their tree trimming procedures to better accommodate farm equipment on rural roads. In an effort to better address the needs of the agricultural community, Bureau of Highways staff have asked farmers to provide names and sections of problematic roads as well as any site specific problems caused by trees. The Howard SCD will facilitate this effort by gathering this information and presenting it to the Bureau of Highways. If you would like to report a problematic section of road, please call us at 410.313.0680 or go to our website, www.howardscd.org, and look for the "Reporting problematic roads caused by overhanging trees" link.

An informational video about this problem is available at https://youtu.be/tm011n9rlzc or on our website.

Farm Academy

Howard County is very unique in its composition of land use and development. For such a small county there is still much agriculture, though not always traditional, making up the composition of the area. Often times these farms are close to developments, creating an interesting dynamic and at times disagreements and complaints. In an effort to create more understanding and better relationships, Farm Academy was developed. Farm Academy is an informal educational program.

On Farm Academy days, farmers explain various kinds of farming operations, ranging from livestock to

crops, produce and nurseries. Each is a three-hour session, offered free on Saturday mornings to participants of all ages.

Look for Farm Academy tours when you visit the Howard County Fair this year. 30-45 minute tours will be held throughout the week: Saturdays, at 11 AM and 1 PM and weekdays at 1 PM and 3 PM. All tours will



This spring a Farm Academy session for Howard County employees was held at Heritage Hill Farm.

start at the red "Farm Academy" tent near the main entrance.

A Fall Farm Academy will be held on Saturday, October 7th. For additional information please contact the Howard SCD,

410.313.0680.



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What's All This About Soil Health?

There has been much discourse about soil health in recent years. The Natural Resources Conservation Service (NRCS) of USDA started a campaign promoting soil health in 2012. Many farmers have adopted soil health as an important aspect of their operations even before "soil health" was a catchy term.

What exactly is soil health? Soil health is the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans. This definition speaks to the importance of managing soils so they are sustainable for future generations.

There are four basic principles for soil health as shown on the NRCS website. First, is using diverse species to increase diversity in the soil. Second, less disturbance of the soil. Third, growing plants in the soil year round. And fourth, keeping the soil covered as much as one can.

The first aspect is to use diverse species to increase diversity in the soil. This means to grow many different crops and Some farms help manage this through crop rotations. They also grow multispecies of cover crops, which include both grasses and legumes, so there

is an addition of Profile of Sassafras Soil nitrogen (with leg-(Maryland's State Soil)

umes) as well as carbon (plant residue), providing better conditions for higher organic matter in the soil. The

plants,

generations.

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animals,

diversity animal and plant life in the soil creases when there is more organic matter. Protozoa, fungi, earthand worms,

many other organisms then enjoy a good organic dinner.

Managing soils by disturbing them less has been a feature in many Maryland farm operations for several decades. The state has many continuous no till farmers. Less disturbance of the soil through no till has helped to increase organic matter too. In addition to the benefits to soil critters, other aspects of healthy soils also improve. Soil structure is maintained, giving an increase in water infiltration, leading to less runoff of water and surface water pollution from nutrients and sediment hanging on to the soil particles. capacity and thus drought tolerance.

er crop roots also add to the soil organic matter. Some farmers have

also taken to growing summer annuals (like sudangrass, sorghum, sunhemp and buckwheat) as a cover so

continued

soils do not need to be bare in the summer time. Sometimes these are used for animal forage, so as with many farm practices, there are additional pluses to the practice.

To keep the soil cov-

ered as much as one can includes

some of the afore-mentioned practices. Continuous no till systems eventually provide much plant residue that will maintain a nice cushion of protection for the soil to prevent erosion and to add the organic matter. There are also direct savings in fuel, labor and machinery costs as less passes need to be made through the field. Our old friend, cover crops, keep the soil covered during the winter months, providing that soil erosion protection, taking up excess nutrients, weed control, and other benefits.

This is just an introduction to some features of soil health and basic principles. In the future, we will explore in more detail the impact of individual conservation practices on soil health. For more information about soil health and the suite of conservation practices that may fit your operation, visit the local soil conservation district. The Howard Soil Conservation District can be reached at 410.313.0680.

This may also help with water holding plants. Growing plants year round is the next key to healthy soils. Cover crops are a great way to do this. After fall harvest of corn and soybeans, cover crops aid in the uptake of excess nitrogen and phosphorus. The cover provides soil erosion reduction. Cov-

Conservation Client Gateway

The Client Gateway is a secure way of working with NRCS online. One can use Client Gateway to track payments, sign up for financial assistance, and sign documents electronically. The online service allows you to work with NRCS at your convenience and around busy schedules during planting and harvesting time. Contact Jim Myers at the Howard office 410.313.0680, for more information about this service.



Our Environment in Our Hands

In the spring of 2009, several Howard County agencies and organizations partnered with the Elementary Science Office of the Howard County Public School System to establish a Meaningful Watershed Education Experience (MWEE) entitled, "Our Environment i n OurHands" (OEOH). This program is designed for fourth grade students in select Howard County elementary schools. Over the past nine years, the program has been revised to support MD Environmental Literacy Standards, as well as to align with MD Science Standards. The program is currently able to support six (6) Title I schools, at no cost to the schools.

This environmental field experience, held on the Living Farm Heritage Museum property, is a full day experience where students conduct research and investigations focusing on two main components: Hydrosphere and Geosphere. Understanding the Earth's systems and how they interact is a key component of the fifthgrade science curriculum, and this experience helps the fourth graders

connect what they are currently learning to what they will be learning next year. This experience serves as an anchor to support two years of their science learning.

On the Hydrosphere side, students compare the physical properties of a stream habitat and pond habitat. The different organisms found in each are explored to identify the external structures that function to allow these organisms to thrive in their habitats. The human impact on aquatic habitats and the organisms within them are discussed in the context of the Chesapeake Bay Watershed. Students participate in three stations during the hydrosphere rotation:

- Exploration of Physical Properties of Aquatic Habitats
- Exploration of Organisms that live in Aquatic habitats
- Macroinvertebrate Mayhem Field Simulation (Game)

On the Geosphere side, students investigate soil samples to identify indicators of soil health: observing the physical properties of soil, the

organic matter that is found within it, how well water filters through the soil; and the importance of these indicators for a healthy environment. A variety of organisms are also explored to identify the external structures that function to allow them to thrive in their habitats. The human impact on soil health and the organisms that rely on it is discussed in the context of Howard County. Students participate in four components during the geosphere rotation:

- Observations of a variety of soil site samples (forest, grass, farm/tilled, pasture, home garden, and eroded/bare soil)
- Exploration of organic matter found within their soil sample
- Water filtration investigation of their soil sample
- Live observations of organisms that depend upon healthy soil for survival (MD Native species: Raptor, Barn Owl, Snapping Turtle, Box Turtle, Black Rat Snake, King Snake).



Michael Calkins, Howard SCD Conservation Planner, facilitates a discussion of comparing the results from the students' soil investigations.

Partners include the following Howard County agencies and organizations:

- Howard County Master Gardeners
- Howard County Master Naturalists
- Extension, University of Maryland
- Howard Soil Conservation District
- The Living Farm Heritage Museum
- Howard County Environmental Services Recycling Division
- M.A.T.T.S. Mid Atlantic Turtle and Tortoise Society
- Girl Scouts of Central MD; Caitlin Dunbar Nature Center
- HoLLIE Howard County Legacy Leadership for the Environment
- Robinson Nature Center/Howard County Recreation and Parks
- Howard County Public School System

"To forget how to dig the earth and tend the soil is to forget ourselves." - Gandhi

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Working with Legislators

Every year in late January/early February the Maryland Association of Soil Conservation Districts (MASCD) organizes a day in Annapolis to provide soil conservation district members from across the state with an opportunity to meet elected officials and discuss issues impacting farmers. MASCD sponsors a luncheon for Senators and Delegates, which gives District representatives a chance to talk with them about legislation they are considering. Supervisors from the Howard Soil Conservation District met with legislators from Districts 9A, 9B, 12, and 13. This often involves making visits to individual legislator's offices and taking the time to review their positions on specific policies.

For the Howard SCD Supervisors, the focus for this year was the Maryland Agricultural Water Quality Cost-Share Program, or MACS for



Howard SCD Supervisors Justin Brendel (Vice-Chair), Bill Barnes (Chairman) and Ken Clements (Treasurer) between visits with legislators in Annapolis.

short. Funding for MACS was eliminated in fiscal year 2017, which put many conservation projects on hold. Without cost-share support it is often difficult for farmers to finance the full costs of best management practices out of their own pockets.

Fortunately, this year's efforts in Annapolis paid off, and the General Assembly approved \$8 million in funding for MACS for FY18. Interestingly, because of the backlog of conservation projects waiting for funding, all but \$1.8 million of this funding is already spoken for. So, if you have a project in mind, please contact the Howard SCD office as soon as possible to get started, before this year's MACS funds are gone.

Greener Pastures

The Howard Soil Conservation District bid farewell to District Manager Bob Ensor last fall. After a long and distinguished career in public service, including 9 years as District Manager, Bob decided to retire in October. Bob graduated from the University of Maryland School of Agriculture in 1971 and began a career with the Soil Conservation Service (now the Natural Resource Conservation Service or NRCS). In his 38 years with the federal government Bob served in a variety of leadership roles, including District Conservationist and Head of the Oversight and Evaluation Division of NRCS. Before coming to Howard SCD Bob also spent 5 years overseeing the MDA MACS program, allocating funding across the state for best management prac-

During his time at Howard SCD Bob worked tirelessly to advance nutrient trading policies, both locally and



serving on m a n y state wide committees. Nutrient trading has the potential to create economic opportunities for the agricultural community,

and Bob did what he could to foster the development of this program. Throughout his career, Bob focused on helping farmers accomplish their conservation goals and finding the resources necessary to put projects on the ground. Although he will be missed, we thank Bob for his dedicated service and wish him all the best in retirement.

SAVE THE DATE

The Howard Soil Conservation District's Annual Cooperators Dinner will be held on Thursday, September 14, 2017 at Air View Farm in Woodbine, owned by Bill and Merhlyn Barnes. The Howard SCD Supervisors and staff hope you will join us to celebrate conservation efforts in Howard County. There will be hay wagon rides around the farm and presentation of awards to recognize farmers that have made conservation an integral part of their operations. For the first time there will also be a pumpkin chunkin cannon for kids of all ages to try!

Howard County Farm Receives Century Farm Award

On January 17, 2017 Governor Larry Hogan honored Maryland's farm families for their commitment to farming and leadership in preserving agricultural land by presenting Century Farm designations to 34 families from 18 counties who have farmed the same land for more than 100 years, including one family that has farmed the same land for more than 300 years and two families that have farmed the same land for more than 200 years.

One of the Century Farms recognized by Governor Hogan was Maple Lawn Farm here in Howard County. Charles E. lager, Jr. and Eugene W. lager currently manage and operate a dairy and turkey farm with 400 registered Holsteins, 20,000 turkeys and 1,000 acres of crop land (owned/rented). Charles's great-great-

grandfather, Henry lager, purchased the original 108 acres in 1839. Crops grown on the farm include corn, soybeans, wheat, hay, alfalfa, pasture and various forage crops. Livestock raised on the farm include dairy cows, beef cattle, turkeys, chickens and pigs. They also currently have a turkey processing plant on site where they offer retail sales.

Since the Maryland Century Farm Program began in 1994, 173 farms – about one percent of the state's 12,200 farms – have received the Century Farm designation. Four of those have received the Tricentennial Farm designation and 26 have received the Bicentennial Farm designation.

The Maryland Century Farm Program was established in 1994 by

Governor William Donald Schaefer to recognize farms that have been in the same family for at least 100 consecutive years, contain a minimum of 10 acres of the original parcel, and gross an annual income of \$2,500 or more from the sale of farm products. The Century Farm Program honors families who have passed their farming operations down from generation to generation, making it possible for future stewards of the land to continue in their family tradition. The Hogan Administration reestablished this annual tradition for Maryland farm families after it had been halted for the past 10 years. The last ceremony was held in 2007.

For more information on the Maryland Century Farm Program visit the Maryland Department of Agriculture website, www.mda.maryland.gov

Remembering One of Our Own



Robert (Bob) Ziehm, former Howard Soil Conservation District Manager, passed away April 25, 2017 at the age of 83. Bob Ziehm served Howard County farmers,

residents and developers for 28 years prior to his retirement in 2000. During his tenure, he witnessed first-hand the development of Columbia. Prior to his time as District Manager, Bob Ziehm served in the U.S. Navy and worked in the field of electrical engineering. Probably his greatest accomplishment was his family. Mr. Ziehm was a loving and devoted husband, father and grandfather. He was also an active member of his church.

To honor the life of Bob Ziehm, and his service, a Redbud tree was planted by the Howard Soil Conservation District supervisors and staff.

We hope this tree will serve to honor his time with Howard SCD, his service to the agricultural community, and his commitment to conserving natural resources.

The beautiful redbud tree was donated by Howard SCD Associate Supervisor Brent Rutley of Capitol City Contractors, LLC.



Howard SCD Chairman Bill Barnes and Administrative Assistant Merhlyn Barnes pose with Mrs. Georgia Ziehm by the memorial redbud tree.

District Website

The HSCD webpage has a fresh new look. The new design is more user friendly and has a variety of conservation information.

The website provides descriptions of common conservation practices used by Howard County farmers, gives program updates and forms and has links to other agricultural and conservation organizations. It also provides contact information for HSCD staff and a relevant calendar.

Stop by the site and take a look. http://www.howardscd.org

14735 Frederick Road Cooksville, MD

DISTRICT HOWARD SOIL

www.howard scd.org

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