The past twelve months have been a year of transition for the Harry R. Hughes Center for Agro-Ecology. We continued and completed a variety of projects in support of Maryland’s working landscapes and the Chesapeake Bay while, as an organization, we positioned ourselves for strong, visible programs in the years ahead. New board members and a new executive director have added talent and energy to the table. We also completed a strategic plan to define and prioritize our goals. We were especially excited to launch the first year of the Russ Brinsfield Internship Program — a game-changer for enriching our research projects while offering an excellent opportunity for Maryland’s next generation of leaders.

As always, we champion the health of our farms and forests, as well as the Bay, through solutions that are both effective and accessible to people who manage the land. The leaders and researchers associated with the Hughes Center continue to deliver. Land managers look to us for viable stewardship strategies; recent governors and legislators consult with us because they know that the Center is respected by environmentalists and growers alike.

We invite you to become involved. Listen to both scientists and growers. Learn how managed harvests keep forests healthy and why conservation farmers don’t fit into neat labels like “organic” or “conventional.” Come to our conferences, and ask for help when answers seem complicated or costly. Everyone can help by testing their assumptions about working lands and the people who steward them. The Hughes Center is honored to be leading the way.

Hon. Harry R. Hughes
President

Dr. Suzanne E. Dorsey
Executive Director

Since its inception in 1999, the Hughes Center has provided $9.9 MILLION to support 68 RESEARCH PROJECTS aimed at helping farmers, foresters, and local governments to achieve both economic success and sound environmental stewardship.

The mission of the Harry R. Hughes Center for Agro-Ecology is to provide leadership to promote environmentally sound and economically viable agriculture and forestry as Maryland’s preferred land use through research, outreach, and collaboration.

The Hughes Center works statewide with offices at the University of Maryland Wye Research and Education Center on Maryland’s Eastern Shore.

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The Hughes Center promotes and supports the work of Maryland farmers who protect our natural resources even while being challenged to produce more food and revenue under increasing regulations. We also help farmers connect with new and expanding markets, especially the growing demand for locally sourced food. It’s a challenge on all fronts, but research shows that Maryland agriculture can enjoy continued success if effective practices and policies are in place to support it.

Highlights
Research commissioned by the Hughes Center was delivered in the 2016 report, *The Future of Sustainable Farming & Forestry in Maryland*. Produced by the American Farmland Trust, Maryland Department of Planning, and Land Stewardship Solutions, the research assessed the effects of public policies on farming and forestry. Among the findings were indications that most Maryland farmers have been able to meet, or are in the process of meeting, their nutrient management regulatory requirements without widespread excessive loss of profits.

The Hughes Center also tackled the challenge of promoting conservation practices on leased farmland, when the interest and understanding of conservation practices often varies between the landowner and farmer. In an effort staffed by the Russ Brinsfield Internship Program, the Center produced the *Agricultural Conservation Leasing Guide*.

Another research project commissioned by the Hughes Center wrapped up in early 2017 with the release of *Health, Safety, and Welfare?* A *Report on the Factors that Favor or Hinder the Flow of Local Food in the Chesapeake Bay Region*, produced by Land Stewardship Solutions and Joe Tassone. The report highlights the conflict between consumer interest in locally grown food and the rules and regulations that hinder increased flow in the local food system. The report will be highlighted at the 2017 conference of the Northeast Sustainable Agriculture Working Group.

What’s ahead?
- Building partnerships to highlight Maryland farmers as leaders in conservation farming
- Identifying strategies to advance local and regional food networks
- Researching ways to adapt agricultural practices and production to a changing climate
- Engaging in consumer education
- Exploring ways to reward farmers for removing carbon from our atmosphere

Our research on the use of cover crops to reduce nutrient runoff has influenced both fiscal policy and field action. In Maryland, 1,758 farmers applied for grants to cover crops in 2017 — which could also sequester between .23 to .46 million tons of carbon dioxide at a cost of just 5 to 10 cents per pound.
The future of Maryland forestry is at a crossroads. But the public is generally not aware of its challenges or the combined positive impact that forestry has on local economies, sound forest management, and forest conservation. A healthy forest ecosystem depends on management; without it, the many benefits from our remaining forests — for employment, water quality, flood resistance, wildlife habitat, and human enjoyment — will decline.

**Highlights**

A detailed analysis of Maryland forestry was presented in *The Future of Sustainable Farming and Forestry in Maryland*, a 2016 report commissioned by the Hughes Center and produced by the American Farmland Trust, Maryland Department of Planning, and Land Stewardship Solutions. The research revealed that the greatest threat to Maryland forestry is the fragmentation of existing forests by large lot development. Fragmentation creates problems for managing, accessing and harvesting the wood in a cost-effective way. It also impacts the health and composition of the forest. Nevertheless, with sustainable management, Maryland forests can still produce large quantities of timber and remove tons of carbon dioxide from the atmosphere. The report concludes that, “If landowners have sufficient incentives for management, obstacles to harvesting can be addressed, and mills and other timber product consumers/users may have enough confidence in supply to invest.”

The Hughes Center also worked with partners in Baltimore County on forest management projects in the Prettyboy watershed. Supported by the Russ Brinsfield Internship Program, guidance was produced to explain how forest landowners could participate in Maryland’s evolving nutrient trading market. Information was provided for a landowner guide about resources and strategies for tree planting, including government funds and tax credits.

**What’s ahead?**

- Convening forestry partners, entrepreneurs, and investors to craft the future forestry business plan for Maryland
- Working with the Maryland Department of Natural Resources and other partners to identify and support forestry-related industries
- Ensuring that land managers have access to the tools they need to keep forests thriving and in service to the broader landscape — by filtering water and sequestering carbon
The Bay’s “pollution diet” — formally known as the Total Maximum Daily Load (or TMDL) — is driving water quality improvements throughout the region. Much progress has been made, but meeting the 2025 clean-up goals will be increasingly difficult in coming years. The Hughes Center is providing valuable support to Maryland’s farmers, local governments, and environmental community as they navigate their roles in this process.

**Highlights**

In 2016, the Hughes Center hosted five workshops for local governments and others involved with creating Watershed Implementation Plans (WIPs) to support regional goals. Speakers explained the Mid-Point Assessment and two-year milestone commitments, outlined funding opportunities for restoration projects, and shared the preliminary expectations of the U.S. Environmental Protection Agency.

Two one-day events, co-sponsored by the Hughes Center, generated detailed discussions about strategies for the Bay restoration. New Ideas to Accelerate Chesapeake Bay Restoration highlighted emerging best management practices for a variety of settings, from farms and suburban lawns to oysters and the urban landscape. The Nutrient Trading Symposium provided a forum for learning about the evolution of Maryland’s nutrient trading program.

As a participant in the Healthy Waters Round Table, the Center partnered with others to host two half-day workshops on stormwater infrastructure geared toward managers, planners and field operators on the Eastern Shore.

The Center also organized the Choptank Symposium at Chesapeake College, where citizens gathered to learn about the many studies and efforts underway to improve water quality in the river and generate conversation about next steps. In a different Bay project, the Center collaborated with the University of Maryland Extension to produce recommendations for the Maryland shellfish commission on resolving conflicts between oyster aquaculture leases and areas with underwater grasses.

**What’s ahead?**

- Making sure the needs of farmers are communicated to the Chesapeake Bay Program so that clean-up goals are realistic and optimized
- Hosting a Choptank II Symposium to learn how conservation practices on working farms have impacted water quality
- Continued support for local governments, addressing needs identified by stakeholders

Local governments have been increasingly called upon to help restore the Bay. The Hughes Center has convened related workshops across the state and carried the concerns and questions of participants to the Maryland Governor’s Chesapeake Bay Cabinet.
Leadership Past & Present

The Hughes Center for Agro-Ecology has been graced by exceptional leadership from its beginning, when former Governor Harry Hughes, known for his self-described position as a “reasonable environmentalist” helped launch the Center in 1999.

Through his continued leadership, the Hughes Center has recruited board members whose range of experience with agriculture, forestry, science, conservation and policy have guided our work for more than 17 years. In 2016, the board completed a strategic plan and welcomed three new members: Bill Bowerman, Don Outen, and Brett Grosghall. We are grateful to Liz Anderson, Christine Bergmark, Todd Berman, and Bo Earnest, whose terms have ended.

Also in 2016, Dr. Suzanne Dorsey became the Center’s new executive director. Dr. Dorsey stepped into a role most recently filled by Dr. Sarah Taylor-Rogers, who directed the Center from 2015-16, and by Dr. Russ Brinsfield, who led the Center from 2000-15.

Building on his multiple roles as a farmer, scientist, and mayor of Vienna, Dr. Brinsfield made invaluable contributions, forging cross-sector relationships and pursuing innovative solutions for working landscapes. Dr. Taylor-Rogers, a former secretary at the Department of Natural Resources and director of the Critical Area Commission, brought a wealth of insight to the Center, broadening the depth and reach of our programs.

Dr. Dorsey began her career working on Bay issues and has returned to direct the Hughes Center after 25 years managing coastal ecosystems in North Carolina. She brings a fresh perspective on restoration progress and possibilities and a passion for science, practicality, and communications.

Russ Brinsfield Internship Program

The Russ Brinsfield Internship Program has been launched. Hannah Catt, a third-year law student at UMD Baltimore, and Melissa Stefun, who studies Environmental Science and Technology at UMD College Park, joined the Center from May through mid-August. They delivered results for three projects:

- Promoting the use of conservation practices on leased farmland
- Resolving conflicts between aquaculture and underwater grasses
- Writing guidance to explain strategies and resources for tree planting in Baltimore County

Catt and Stefun reviewed existing research and resources; interviewed farmers and toured farms; consulted with land managers and technicians; and conducted surveys.

“Talking to all those folks and hearing about their interests and constraints made the work meaningful,” Stefun said. “I learned about the extent of agriculture in Maryland and the different things, like legislation, that effect it.”

“So many people understand the impact of their actions on the Bay and how much the Bay is an economic driver for the region,” Catt added. “I saw that people on both sides of the aisle really care about creating environmental policy that works.”

The 2017 internship program was supported by the Grayce B. Kerr Fund and conducted in partnership with the Agricultural Law Education Initiative.

A unique partnership

The Harry R. Hughes Center for Agro-Ecology is a non-profit organization officially affiliated with the University System of Maryland. The Center supports the system’s interests by promoting, sponsoring, and implementing scientific research and other services that help advance the university’s mission. The Center and University System sign an annual agreement that describes the purpose of the Center and the relationship between the two parties. However, the Center is a legally separate, 501(c)3 nonprofit organization, recognized as such by the Internal Revenue Service. The management and control of the Center rests with its Board of Directors.

How is the Hughes Center funded?

The Center receives funding from a variety of private sources, the state government, and the University of Maryland. Donations from individuals and grantmakers support a variety of research and outreach activities, including the Harry R. Hughes Fellowship Endowment and Russ Brinsfield Internship Program. Annual allocations of state funds are administered through the University of Maryland College of Agriculture and Natural Resources, which also provides operations and compensation funding for 5 staff positions.

About this Financial Report

The 501(c)3 funding stream has reviewed by an independent accountant. A full copy of the report is available from the Center upon request. We have also listed the funds administered by the University System of Maryland and its agents; those funds are audited separately according to the system’s protocol.
Envision a future in which the Bay is healthy, and farmers and foresters see themselves as ecosystem managers who steward the land to produce food and fiber.

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