

Harry R. Hughes

CENTER FOR AGRO-ECOLOGY

Annual Report 2018-2019

Solutions for Maryland: Farms, Forests and the Chesapeake Bay



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In Memory

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Hon. Governor Harry R. Hughes

The mission of the 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.

Staff

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Ms. Barbara South
Administrative Coordinator
Mr. Richard Gomez
Business Manager
Ms. Linda Dawkins
Program Management Specialist*



Harry R. Hughes

CENTER FOR AGRO-ECOLOGY

Dear Friends,

The Hughes Center is pleased to provide this overview of the Center's work during the past year. Remaining true to our mission, we funded several scientific research projects addressing the needs identified by the agricultural and forestry communities. We continue to engage stakeholders in our outreach programs including the Watershed Implementation Plan and the Agriculture Conservation Leasing workshops.

The Center remains committed to investing in tomorrow's leaders. This summer we celebrated the third year of the Russ Brinsfield Summer Internship program. Once again, the interns impressed everyone they encountered with their work ethic, willingness to delve into the issues and projects and their work products. We encourage you to help us find our 2020 interns by sharing the link to the internship announcement found on go.umd.edu/brinsfieldinternship.

We also want to take this opportunity to thank you for your engagement with and support of the Center during this transition period. Your kind words and actions regarding the loss of our leader, Governor Harry R. Hughes continue to be an affirmation of his impact on Maryland's landscape and the Chesapeake Bay. We look forward to announcing a new Executive Director, who together with the Board will ensure the continuation of Governor Hughes' legacy to protect the State's natural treasures.

Nancy Nunn
Interim Director



The Hughes Center works statewide with offices at the University of Maryland Wye Research and Education Center.

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Queenstown, MD 21658
(410) 827-8056

go.umd.edu/hugescenter



COLLEGE OF
AGRICULTURE &
NATURAL RESOURCES

The Harry R. Hughes Center for Agro-Ecology is an affiliate of the University of Maryland, College of Agriculture and Natural Resources.

Agriculture



Edwin Remsberg

The Hughes Center remains committed to identifying agriculture practices that promote a healthy environment and profitability for farmers. Our work in agriculture is a result of research and outreach needs identified by stakeholders and encompasses a broad range of topics.

Highlights:

In FY '19, the Hughes Center funded UMD researcher Dr. Gurpal Toor and Nobel Prize winner Dr. Keith Paustian's research project, "Assessing the Effectiveness of Soil Health Practices in Enhancing Soil Organic Carbon in Maryland." The project's goal is to acquire the data and develop the tools necessary to quantify soil C sequestration and improve soil health for the agricultural soils of the State. Information garnered through this project will be shared with stakeholders and Maryland's Soil Healthy Advisory Committee of which the Executive Director is a member.

Earlier this year, the Hughes Center and the University of Maryland Agriculture Law Education Initiative conducted five regional workshops for agriculture service providers, landowners and farmers to educate them about including agriculture conservation practices on leased land. Forty-two percent of Maryland's agricultural land is leased so the implementation of conservation practices on these lands presents a vast opportunity to increase the number of best management practices on the ground.

Information about this project can be found at go.umd.edu/conservationleasing.

The Maryland General Assembly directed the state Department of Agriculture to work with the Hughes Center as they developed a strategic plan for Maryland agriculture. The Center's staff assisted MDA with a series of regional listening sessions to obtain stakeholders' input.

What's Ahead:

- The Center will collaborate with the agricultural stakeholders to identify next steps from the Strategic Plan for Maryland Agriculture and the Center's funded project, Chesapeake Foodshed Assessment and develop actions.
- We will continue to work with UMD Agriculture Law Education Initiative to develop products and approaches that address obstacles to implement conservation practices on Maryland's leased agricultural lands. If you have suggestions for audiences, please contact us.
- The Center will continue to build strong relationships with the agricultural community, the local governments, environmental organizations, and Maryland's state agencies as they work together on the Phase III Watershed Implementation Plan.

Forestry

The Hughes Center envisions Maryland's forest landscape as one that is managed for health, environmental impact and profit. At present, 72 percent of Maryland's forestlands are under private ownership. This situation, coupled with several recent industry losses in the state, provides for new opportunities to ensure the future of Maryland's forests.

Highlights:

The Center was asked to facilitate listening sessions for the Maryland Department of Natural Resources as it sought to get input as it began updating its 10-year Forest Action Plan for the state's forests. Six regional listening sessions were held throughout Maryland, and in total saw the participation of professionals in the harvesting industry, representatives of environmental organizations, and local government staff and officials.

The Hughes Center was asked by the Maryland legislature to provide an independent study of the state's forest cover and tree canopy. This study and large data-gathering effort will require partnerships with various state and federal agencies, local nonprofits and industry organizations.

Information gathered through the Center's Growing for Good project illustrated the need to improve the

forestry literacy of Maryland's citizens. The Center is collaborating with forestry organizations to develop an approach to increase the public's knowledge and appreciation of forestland.



Partners with the University of Maryland Extension will educate forestry landscapers and landowners on measures that can improve forest health of small-acreage properties.

What's ahead:

- Increase public support for and understanding of Maryland's forests and the importance of management.
- Share information garnered through the Center's funded research project, "Improving Forest Health of Small-Acreage Properties through Service Provider Training and Landowner Education."

Chesapeake Bay

Integrated Application Network, UMD

The Center's efforts in the agriculture and forestry areas are tied to our commitment to a healthy Chesapeake Bay and waterways. With forward-thinking solutions, the Center champions watershed health while addressing the challenges posed by the region's increased population, development, and a changing climate.

Highlights:

This fiscal year, the Center continued its work with the Maryland Departments of the Environment and Agriculture to help reach out to local communities and inform them of the next steps for Maryland's Phase III Watershed Implementation Plan to clean the Chesapeake Bay. Clear communication between

WIP implementers and state agencies is key to ensuring a successful Bay cleanup effort. In total, six workshops and three informational sessions were held across the state, with hundreds of participants, during FY '19.

Center-funded research to address saltwater intrusion due to sea level rise continues to make headway, and has even made national news. Saltwater intrusion is the encroachment of saltwater into fresh groundwater, and it is happening today in communities on the Eastern Shore. Part of Dr. Kate Tully's larger project, work funded by the Center is looking at ameliorating salt stress on agricultural crops. Elizabeth de la Reguera, a research technician on the study, was awarded a prestigious Northeast Sustainable Agriculture and Education (SARE) graduate award for her work on soil carbon storage in coastal agricultural lands affected by saltwater intrusion, which is a part of the study funded by the Center.

What's ahead:

- The Center is working with other organizations to identify potential solutions to address the need for technical assistance to implement water quality practices.
- The Center will continue to host educational convenings around stakeholders' issues and needs as they work through Maryland's Phase III Watershed Implementation Plan.



Edwin Remsberg

University of Maryland researcher Dr. Kate Tully works in the field on the Lower Eastern Shore of Maryland. The Center is funding part of her study that aims to ameliorate salt stress on crops impacted by saltwater intrusion.



Hughes Center Board of Directors

A core element of the Hughes Center since its founding in 1999 has been its Board of Directors. This group represents the varied interests of our stakeholders in the agriculture, forestry and the environmental communities. The members of the board are valued for their guidance and are critical in driving our mission of promoting environmentally viable farms and forests.

This past year, the Board voted on term limits for our Board of Directors, which ultimately resulted in the departure of many highly valued members. We'd like to thank Chris Black, Fran Flanigan, Verna Harrison, Erroll Mattox, John Valliant and Lucy Wright for their service to the Hughes Center.

Chris Black



Chris spent his youth working on his family farm and orchard in Thurmont, Maryland, and knew that is where he wanted to be as an adult, too. What attracted him to the Hughes Center Board of Directors was not just the diversity in membership, but the discussions by members who always respected compromise. While joining the Board was partly a method for Chris to grow as an agricultural leader in Maryland, during his nine years on the board he has seen the Hughes Center grow, too.

"From what Governor Hughes started with to what it has grown into — it is ten-fold," he said. "I've seen it grow into a very respectable organization on a national level, especially dealing with the issues of the greatest estuary in the country, the Chesapeake Bay."

Now, still running the orchard, Chris says he hopes to see the Center continue on the forefront of the needs for agriculture, forestry and the Bay.

Fran Flanigan



Since the beginning of her 23-year career as Executive Director of Alliance for the Bay, Fran has been committed to getting people with opposing viewpoints to talk to each other and find workable solutions, which is a mission of the Hughes Center, too.

"I think the Hughes Center is still a very important space in Maryland and one reason we're as far along as we are environmentally," Fran said.

As a Board member, Fran always brought an urban perspective, and reflected on the importance of camaraderie among Board members who represent various interests, which leads to robust discussions and problem solving. Fran highlighted the Hughes Center's goal for providing sound science as a facilitator in moving the state forward environmentally as a focus point for Center staff in the future.

Erroll Mattox



Erroll, a United States Air Force veteran, got his professional start in agriculture farming certified organic produce before beginning advocating for sustainability and Chesapeake Bay cleanup. Erroll noted barriers to local food in the supply chain as an issue critical for the Center to remain involved in moving forward.

"This region will potentially become a hub," Erroll said. "Diversification of crops on the Eastern Shore is going to be key. The question is what will it be diversified to."

Erroll also said the Center should also focus on the economic value of healthy soil, small-acreage forest management, and land use planning with an eye toward how it will impact transporting agricultural products off the Eastern Shore. During his time on the board, Erroll brought a focus toward pushing for the Hughes Center to become a center of excellence and a go-to source for sound scientific information.

Verna Harrison



Verna has been involved in the Chesapeake Bay cleanup since the beginning, working closely under the Center's eponymous founder, Governor Harry R. Hughes, in his administration. She values the Center's role as an independent scientific source, and over the years has seen the Center dig deeper into issues facing Maryland.

"As a Board member, I think the thing I'm most proud of is making the time to develop relationships with people like Bobby Hutchison and Ed Fry and get a deeper perspective of their point of view," Verna said.

Verna highlighted several areas where the Center could remain involved in current and future Maryland issues. These include nutrient trading verification, continued outreach for the state agencies overseeing Maryland's Watershed Implementation Plan, and calculating the mass balance of nutrients on the Eastern Shore of Maryland.

John Valliant



After being asked to join the Hughes Center's board, the more John learned about the Center, the more interested he became. For John, it's what happens for the greater public to benefit as a result of the research being produced, than research not acted upon. John urges Hughes Center staff to remain focused on the organization's research-based mission, noting impacts from Center-funded research on environmental advancements by agricultural producers over the years.

"When we talk about what makes the Hughes Center different from everyone else, it's the real research," John said. "At the end of the day, I think our mission still boils down to good research to inform public policy."

Being on the Board has helped John learn more about and develop a greater appreciation for Maryland agriculture, its producers, and all of their efforts going into cleanup of the Chesapeake Bay.

Lucy Wright



The Hughes Center captured Lucy's attention in its early years. From a foundation of data based on research, the Center develops and supports initiatives that are unique in the State. "The staff and the Board work hand-in-glove to think outside the box to find solutions to address agricultural issues that are difficult on different levels. The Center's affiliation with the University of Maryland contributes to its many successes," Lucy said.

"It was a great privilege for me to serve on the Hughes Center Board. To be in a room with women and men dedicated to the health and viability of Maryland's working landscapes was one of the most encouraging experiences of my life," Lucy said. "With strong personalities and opinions, the board was always gracious, respectful and willing to do the hard work to achieve the best outcome for the greater good. I miss that experience."

Russ Brinsfield Internship Program

The Hughes Center has completed its third year of the Russ Brinsfield Internship Program, a partnership between the Center and the UMD Agriculture Law Education Initiative. UMD College of Agriculture and Natural Resources Student Michael Marinelli and UMD Francis King Carey School of Law student Victoria Long joined the Center from May through August 2019.

"I am very grateful for this internship. It was a unique experience with hands-on learning that allowed me to broaden my understanding of certain legal issues that agriculture is facing, and see how these concerns are addressed collaboratively," Victoria said.

The interns delivered results for several projects on which they took the lead over the summer:

- Detailed findings of three regional food reports commissioned by the Center to share with the Maryland Department of Agriculture for its strategic plan for agriculture.
- Finalized a report on current



Michael Marinelli and Victoria Long

regulations and penalties relating to the theft of aquaculture oysters from leases and presented it to the Maryland Aquaculture Coordinating Council.

- Developed and presented to the Maryland Department of Agriculture a report on Virginia's tax credit program for implementation of agriculture best management practices.
- Followed up with attendees of the 2019 Agriculture Conservation Leasing workshops and collected data on the implementation of best

management practices to date on leased farmland.

- Initiated the creation of a legal guide on direct marketing for specialty crop producers in Maryland.
- Gathered data on forest mitigation banking in Maryland, including details on varying strategies in each county.
- Researched urban agriculture tax credit programs across the country with a goal to assist Baltimore City's urban agriculture program.

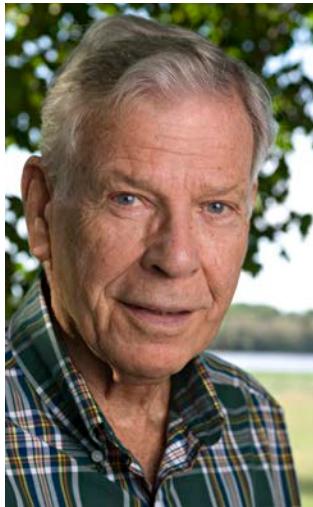


"The Hughes Center brings different stakeholders to the table to work together and accomplish shared goals. After meeting with policymakers, farmers, lawyers, citizens and environmental advocates, I have come out of this internship with a better appreciation for the effectiveness of bringing people together," Michael said.

Visit go.umd.edu/brinsfieldinternship for more information, including details on how to apply for the internship.

In Memory of Governor Harry Roe Hughes

1926-2019



Governor Harry Roe Hughes was remarkable in the way he served Maryland and in his vision for a cleaner Chesapeake Bay, but he was also equally remarkable as a person outside of the political sphere. He was a man of humility, honor, integrity, and kindness who led through consensus building.

"Governor Hughes was a cornerstone for the Chesapeake Bay cleanup initiative. Most importantly, for me, he was

the kindest man I think I ever knew, and his attitude was so positive all the time," said Dr. Russ Brinsfield, the first director of the Maryland Center for Agro-Ecology. The Center was later renamed to the Harry R. Hughes Center for Agro-Ecology. "He was a consensus builder — not divisive at all, and he always reached across the aisle. His leadership style is the reason we're as far along as we are with the Bay cleanup."

He popularized the connection of land use with water quality — something that drives Bay restoration to this day — and helped solidify in the minds of the public and the state legislature the importance of restoring the largest estuary in North America. It was Governor Hughes who in 1983 pushed for the first regional agreement between states that surround the Chesapeake Bay. His administration was the first to push legislation such as the Critical Areas Act, and his administration that established the Chesapeake Bay Trust.

Governor Hughes' legacy of environmental stewardship did not end after his departure from office. In 1999, Governor Hughes and other visionaries started the development of a Maryland Center for Agro-Ecology, founded on the notion that people can develop agriculture both as a profitable industry in Maryland and one that conserves and renews Maryland's natural resources. Renamed in honor of the governor in 2006, the Harry R. Hughes Center for Agro-Ecology continues the Governor's legacy today of bringing diverse stakeholders together to discuss difficult issues and find solutions based on science.

"Governor Hughes, in his mild-mannered way, encouraged action," said Fran Flanigan, former Hughes Center Board Member and former director of Alliance for the Chesapeake Bay. "I remember a meeting in his office, after he had received the report from the Chesapeake Bay Program, when he said to his assembled staff, 'This report cannot sit on a shelf. We must act.' I think that was his philosophy throughout his public career."

Challenges come and go. But it is how these challenges are met and solved that is written in the history books.

"Together, we will," Governor Hughes once said at a 2000 press conference on the Agro-Ecology Center's creation. In honor of the Governor, let us meet future challenges facing the state and the Bay in his style — with collaboration, honor, and integrity in search of the best solutions for all involved.



A note on Hughes Center financials

A Unique Partnership

The Harry R. Hughes Center for Agro-Ecology is a nonprofit organization 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.

How is the Center Funded?

The Center receives funding from a variety of private sources, the state government, and the University of Maryland. 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 five staff positions.

About This Financial Report

The 501(c)(3) funding stream has been reviewed by an independent auditor. A full copy 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.

Note: See entire financial report on opposite page

Please consider making a contribution

By providing a gift to the Hughes Center, you will ensure that Governor Harry R. Hughes' legacy to address the needs of our state's working lands continues. 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.

If you would like to donate to the Hughes Center, a gift could be made by check payable to the Harry R. Hughes Center for Agro-Ecology and sent to:

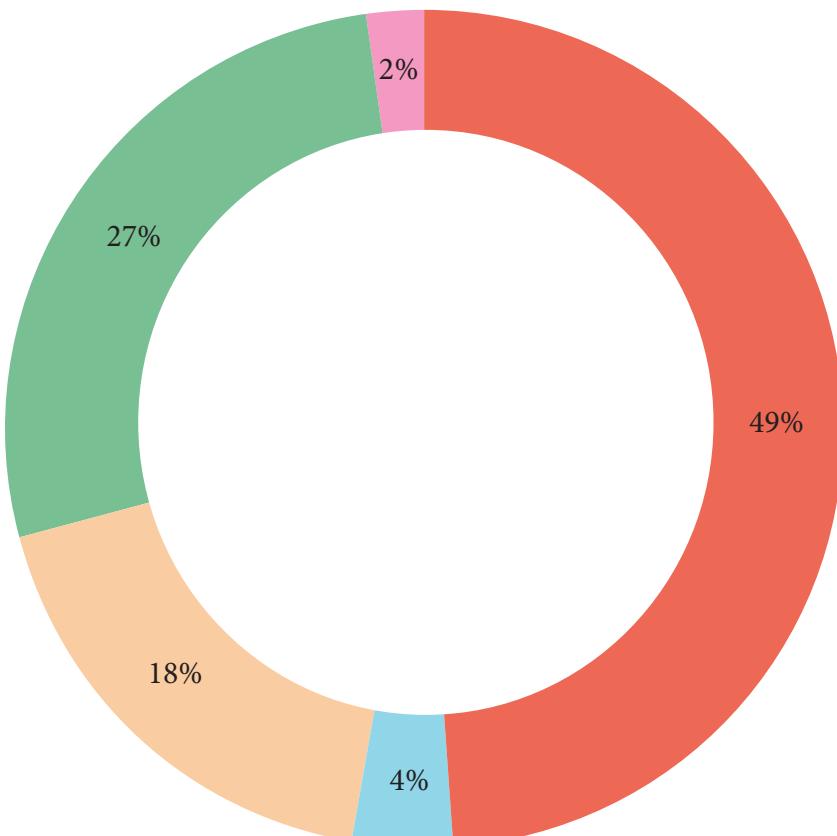
PO Box 169
124 Wye Narrows Drive
Queenstown, MD 21658

If you would like to donate to the Harry R. Hughes Fellowship Endowment, a gift could be made by check payable to the University of Maryland College Park Foundation and sent to the address listed above. Please specify in the memo of your check that the donation is for the Harry R. Hughes Fellowship Endowment. Alternatively, you can send your donation directly to the University at its online giving page at agnr.umd.edu/give.

Donations are tax-deductible to the extent allowed by law.

2018-2019 Financial Report

■	State Funds for Research and Outreach
■	Grant Funding
■	Operations and Compensation
■	Harry R. Hughes Fellowship Endowment
■	Total 501(c)(3) Nonprofit Funds



The 501(c)(3) Nonprofit Funding Stream	
Revenue	FY 19
Contributions and Grants	52,750
Program Income	20,980
Interest	286
Total Revenue	\$74,016
Expenses	FY 19
Programs	
Research	199,403
Outreach & Education	29,525
Supporting Services	
Management and General	2,806
Fundraising	0
Total Expenses	\$231,734
Net Assets at Beginning of Year	\$191,695
Change in Net Assets	157,717
Net Assets at End of Year	\$33,978
Funds administered through the University of Maryland College of Agriculture and Natural Resources, University System of Maryland Foundation & College Park Foundation.	
	FY 19
**Research/Outreach State Funds	852,316
Grant Funding	63,633
Operations and Compensation	311,334
Hughes Fellowship Endowment	467,867
Total Administered Funds	\$1,695,150
Funding Overview	
Total Administered Funds	1,695,150
Total 501(c)(3) Nonprofit Funds	33,978
Total Combined Funds	\$1,729,128

*Note: The fiscal year runs from July 1-June 30.

**Note: \$609,994 is committed funding



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