TRUSTED RESEARCH LOCAL EXPERTS

UNIVERSITY OF MARYLAND

EXTENSION

To serve

33,299 residents of Caroline County with our

7 University of Maryland Extension Faculty along with

50 partnerships

How are we doing this?

Solutions in your community

University of Maryland Extension, Caroline County

Annual Report 2024

Address: 9194 Legion Rd., Ste. 4, Denton, MD 21629 Phone: 410-479-4030 extension.umd.edu/caroline-county

The University of Maryland Extension, Caroline County

County, State, and Federal Partnerships







for 33,299 Caroline County residents

The University of Maryland Extension, Caroline County Office is a unique organization that provides research-based, informal education to citizens of the County and local area. Our educational programs cover a wide range of topics, including agricultural production, natural resources, food safety, nutrition and healthy lifestyles, youth development, volunteer development, urban agriculture, and agricultural nutrient management. These educational and training programs provide



current, practical information through workshops, seminars, clinics, camps, displays and newsletters.

The University of Maryland Extension Office represents a partnership of County government, the University of Maryland College of Agriculture and Natural Resources, and the U.S. Department of Agriculture. We are glad to share with you this summary of our activities and accomplishments that provided noticeable impacts for the benefit of our communities.

We are pleased to present this report to the citizens of Caroline County to help demonstrate the impact and importance of the work that Extension does in our communities. Our work in 4-H Youth Development, Environment and Natural Resources, Agriculture, Watershed Restoration, and Healthy Living touches thousands of our fellow citizens with research-based, practically oriented information to help Marylanders improve their lives, their businesses, their health, and their opportunities. We look forward to continuing our work to help Caroline County residents thrive!

Sincerely, Dr. Paul R. Rickert, Area Extension Director







4-H Youth Development









These photographs exemplify the unwavering commitment of UMD's 4-H program to fostering an inclusive and inspiring educational environment.







Program Educator Navonne Owen Program Assistant Lisa McKenna

The Caroline County 4-H Youth Development Program empowers youth ages 5-18 to thrive through hands-on learning and skill-building in a supportive environment. With over 100 years of tradition and strong publicprivate partnerships, 4-H inspires growth, resilience, and community impact through collaboration with dedicated volunteers and staff 4-H Program areas include: ☐ Science, Engineering and Technology ☐ Healthy Living ☐ Citizenship and Leadership ☐ Volunteer Development 4-H delivery modes include: ☐ 4-H Clubs ☐ Afterschool programs ☐ School Enrichment ☐ Community and outreach programs

☐ Camps, and more!

4-H aims to lead in youth development, empowering growth, learning, and collaboration while driving transformative change to strengthen individuals, families, and communities.

From January through June, Caroline County 4-H engaged over 60 fourth graders weekly through Kitchen Science activities at Federalsburg and Greensboro Elementary Schools, fostering STEM learning and curiosity. Programs like the Mid-Shore STEM Festival, #Adulting101, and summer camps expanded community partnerships and reached diverse audiences with hands-on skills and career connections.

The new 4-H Ambassador program empowered youth as leaders, boosting visibility and outreach. With new enrollments and two UME-certified volunteers joining the effort, Caroline County 4-H continues to inspire growth, education, and community impact.









SNAP-Ed helping establish container gardens at Federalsburg and Greensboro Judy Centers. Parents, children, and staff attended to the garden and the fresh produce was used in classroom tastings.





SNAP-Ed distributed nutrition education to classroom throughout Caroline County. Here we have students making Grinch Kabobs and practicing their cutting skills.

Program Educators

Maryland SNAP-Ed Rena Brooks, BS Project Leader & Educator

Caitlin Blough, MAT Faculty Assistant

Maryland SNAP-Ed

Maryland's SNAP-Ed Program partners with K-12 schools, early childcare centers, food assistance sites, farmers markets, and local organizations. The goal is to improve healthy eating and physical activity behaviors of food insecure youth and adults throughout the Caroline County area.

MD SNAP-Ed participants learned healthy behaviors by:

- Trying new foods and cooking healthy recipes
- Utilizing cost saving shopping skills to stretch food dollars
- Growing fresh fruits and vegetables
- Increasing physical activity in school, at home and in the community

MD SNAP-Ed offers:

- In-person and virtual lessons with children, adults and families
- Educational resources healthy recipes, cooking demonstrations, nutrition blogs, Facebook posts, newsletters, informational texting programs, informational shopping bags, school recess physical activity kits, classroom movement kits and children's healthy focused book distributions
- Nutrition education at farm stands, farmers markets, food assistance sites and grocery stores

Program Highlights/Impacts/Outcomes

Food Insecure Youth and Adults Reached through Direct and Indirect Education

- 2,208 persons reached
- 4,416 pieces of indirect education distributed

Healthy School Classrooms, Cafeteria and School Gardening Programs

- 5 Schools, 2 Judy Centers, 1 MRDC Head Start Site, and 2 Private Pre-K Sites
- 60 Unique Classrooms 1,149 students/2,624 parents reached
- 711 Classroom tastings
- 9 Classroom Gardening Activities and 2 Outside Container Garden Site
- 1 County-wide "Eat Your Words" book distribution 4,085 books distributed
- 6 Physical Activity Movement Hallways Installed
- 225 Physical Activity aids distributed
- 265 Healthy Eating aids distributed

Partnered with local Food Pantries and Farmers' Markets

- 1 Food Assistance site with 7 sites
- 1 Farm stands/farmers' markets
- 4 Farm stands that accept SNAP, WIC, FMNP benefits

Maintained Social Media sites to share nutrition information

- 1 Countywide social media site
- 12 Nutrition related posts shared
- 48 people reached

MD SNAP-Ed Educator Rena Brooks partnered with other Extension Faculty and Staff to promote Extension and MD SNSP-ED at:

- 2 Summer Safety Events
- 1 Back to School Event



After reading, "Up Down and Around", students chop up fresh veggies to create a salad in a bag.





In addition to nutrition education, students learn about the importance of drinking water. After reading, "Potter the Otter: A Tale About Water," students create their own flavored water cups in their classrooms. Federalsburg Elementary participated in a school wide water campaign, where every student and teacher received their own *Water You Waiting For* drinking cup.





Program Educator

Dr. Travis Ford

Agent, Agriculture and Food Systems;

Program Description

UM Extension Caroline County offers a variety of educational services to the farm community. Programs educate, train, certify, and recertify agriculture producers to sustain profitability, protect the environment, and meet state regulations.

Classes Offered:

- Agronomy meeting
- •Pesticide Recertification
- •Nutrient management voucher training

Travis W. Ford, Ph.D. is an accomplished CCA agronomist with a passion for advancing sustainable agriculture and precision technology. He earned his Doctorate in Food and Agriculture Science from the University of Maryland Eastern Shore, where his research focused on remote sensing and in situ observations in cereal crop field experiments. His work laid the groundwork for innovative approaches to subsurface drip irrigation, multispectral imaging, and nitrogen management strategies.

With over a decade of experience in academia and applied research, Dr. Ford has held roles as a Research Agronomist, Postdoctoral Research Associate, Graduate Research Assistant, and Teaching Associate. His career highlights include leading multidisciplinary teams in precision agriculture projects, teaching GIS science, and mentoring students through academic programs.

Dr. Ford's research has contributed to a deeper understanding of nutrient management, crop systems, and remote sensing technologies. His publications in peer-reviewed journals and conference proceedings underscore his expertise in leveraging UAVs, GIS, and phytochemical analysis to address agricultural challenges.

Dr. Ford is committed to developing sustainable, datadriven solutions that support profitable crop and livestock industries while protecting natural resources, with a particular focus on the Chesapeake Bay watershed.





Program Educator

Marlow Dilling

Nutrient Management Advisor

In addition, our office assists farmers by developing Maryland state mandated Nutrient Management plans. This program provides farmers with information on Best Management Practices that balance nutrient applications with crop nutrient requirement, thereby enhancing farm profitability while protecting water quality.

Highlights for the Nutrient Management Program for 2024 include:

- 72 Plans Written
- 16,272.72 Acres Planned
- 768 fields planned
- 7 New Operators Served





Program Educator

Eric Helm Buehl, BS

Principal Agent Associate & Regional

Watershed

Restoration Specialist

Program Description

To provide educational programs focused on helping local and county governments and watershed groups to plan, develop, implement, and monitor projects and programs that lead to quantifiable reductions in nonpoint sources of pollution.



Program Highlights/Impacts/Outcomes

123 Individuals participating in events, educational presentations, event displays, and project tours.

22 Groups and individuals where stormwater and water quality technical assistance was provided (including local agencies and municipalities, watershed groups, and a community association).

\$3,264,455 in Funding to implement water quality and stormwater-related projects



In November 2024, USDA Natural Resources Conservation Service's Maryland State Soil Scientist Phillip King and Watershed Specialist Eric Buehl utilized ground penetrating radar to ensure that no unmarked graves were located in an area where stormwater work is to be performed as part of the Jonestown Community Flooding Project near Preston. Photo source: L. Grunden, Caroline County.

MARYLAND EXTENSION

Contact us at:

Caroline County Extension Office 9194 Legion Rd., Suite 4 Denton, MD • 21629 Phone: 410 479-4030

Pnone: 410 4/9-4030

extension.umd.edu/caroline-county

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