In 1914, Cooperative Extension was established by the United States Congress through the Smith-Lever Act. The intent was to extend university research and knowledge to the local populace. Cooperative Extension is a national educational network delivered through the nation’s seventy-two land grant universities.

In Maryland, Cooperative Extension is known as the University of Maryland Extension (UME). UME operates through the University of Maryland at College Park, and the University of Maryland Eastern Shore. Extension has field offices in all twenty-three Maryland counties and Baltimore City.

UME faculty and staff are professionals engaged in the delivery of educational programs that address issues of concern at the local and state level. They work to provide “Solutions in your Community” through key program areas including agriculture, environment and natural resources, 4-H youth development, food and nutrition, health and wellness, financial planning, home gardening and the Chesapeake Bay.

Programming is made possible through successful partnerships with local, state, and federal government. UME programming is also supported by grants and donations. These partnerships allow UME to accessible, reliable, and relevant to all resident of Queen Anne’s County as the mid-shore region.

In this report, UME Queen Anne’s County is proud to share its outreach, programming, and educational efforts of 2017.
Agronomy Program

NEW THIS YEAR—AGRICULTURE AWARENESS DAY

As Extension Educator for agriculture it is Jenny’s job is to deliver unbiased, researched-based education to our community. In April 2017 the Ag community in the County came together to deliver this kind of education to all 7th graders in Queen Anne’s County Public Schools.

The objective of the program was to increase awareness of agriculture and careers in agriculture. The day included five interactive learning stations: grains, conservation, technology, farm animals, aquaculture, pollinators, vegetables, nurseries and much more. The program was such a success we plan to continue the program each year.

Impacts – Queen Anne’s County Agronomy Day – 92% indicated the information would be of benefit to them or their operation. Farmers indicated a savings of $20.23 per acre based on the knowledge and skills they gained from Extension programming throughout the year. Based on the 95,270 acres associated with the Agronomy Day program alone, the total estimated economic impact of Jenny Rhodes’ 2017 agronomy programs is ($20.23*95,270 acres) = $1,927,312.

Private Pesticide Applicator training - On average, participants attending the training increased their profit by $5.95 per acre. Based on the 95,270 acres associated with the applicators trained this year, the total estimated economic impact of the pesticide program annually is ($5.95*95,270) = $566,857.

Jenny engaged in 70 teaching events or classes this year with 2,653 attendees!

Jenny also received the Pride of the Peake award raising over $30,000 for scholarships for students enrolled in the new Agriculture AAS Degree Program at Chesapeake College.
An Economic Value of nearly $115,000 to the Queen Anne’s County Agriculture Community

Queen Anne’s County has approximately 129,005 acres of cropland according to the USDA 2012 Census of Agriculture. In general, these acres require a nutrient management plan that can manage nutrients for one to three years. Plans must also be written for poultry producers who raise poultry with no acres tilled. Over $50,000.00 is committed to this program by University of Maryland Extension through non-county funds.

In 2017, the Queen Anne’s County Nutrient Management program through Nutrient Management Advisor Casey Foreman, served 76 cooperators, through 283 plans collectively managing 22,164.1 acres (17.2% of Queen Anne’s County harvested cropland) (a value of $99,738.45). Further evaluation was completed on 52 fields for 14 cooperators on the use of phosphorus on high phosphorus fields. This evaluation of 1,279.7 acres (a value of $1154.40) assured the environmentally sound use of phosphorus and in many cases saved cooperators input costs using manure over commercial fertilizer.

A Pre-Sidedress Nitrogen Test (PSNT) was conducted on 11 fields totaling 278.3 acres (a value of $110.00) that received manure to evaluate the need for additional nitrogen for the production of corn. This evaluation showed that 1460.2 pounds of nitrogen did not need not be applied saving cooperators $700.90 in nitrogen costs.

A Fall Soil Nitrate Test is required before any nitrogen can be applied to small grain. The advisor conducted tests on 48 fields (a value of $480.00) totaling 1,246 acres. 31 (65%) of the fields totaling 899.4 acres were deficient in nitrogen allowing the application of up to 26,982 pounds of nitrogen that had a value to local commercial agriculture vendors of $12,951.36.

It is estimated that for every $1.00 that University of Maryland Extension invested in Nutrient Management, the Queen Anne’s County Farm Community got a return of $2.62.

UMD Sea Grant Extension

Mr. Eric Buehl works with communities, citizen groups, and governments in the region to help improve water quality in the rivers and creeks that feed into the Chesapeake Bay. His responsibilities are spread across a 5-county area from Talbot to Cecil. His activities specific to QAC in 2017 include the following:

- Provided Grant and Technical Assistance to 5 agencies and watershed groups and to 2 individual landowners.
- Participated in 5 events reaching 64 individuals which included 4 educational presentations and 1 event display.
- Worked closely with Queen Anne’s County officials to arrange a tour to showcase innovative stormwater best management practices for staff from a neighboring county’s Planning and Public Works Departments.
4-H is the nation’s largest positive youth development and youth mentoring organization, empowering six million young people in the U.S.

In partnership with 110 universities, 4-H life-changing programs are research-backed & available through 4-H clubs, camps, afterschool & school enrichment programs in every county & parish in the U.S.

The 4-H Study of Positive Youth Development is a decade-long study, completed by a team of researchers at the Institute for Applied Research in Youth Development at Tufts University, Medford, MA.

The report shows that 4-H youth excel beyond their peers. 4-H’ers are about:

- **Four times** more likely to make contributions to their communities (Grades 7-12);
- **Two times** more likely to be **civically active** (Grades 8-12);
- **Two times** more likely to make **healthier choices** (Grade 7);
- **Two times** more likely to participate in **Science, Engineering, and Computer Technology programs** during out-of-school time (Grades 10 – 12); and
- 4-H girls are **two times** more likely (Grade 10) and nearly **three times** more likely (Grade 12) to take part in **science programs** compared to girls in other out-of-school time activities.

In Queen Anne’s County in 2017

- **3,806** youth served through County 4-H Programs (up 60%!) 
- **643** youth enrolled in 14 traditional and special interest clubs (up 53%!) 
- **2,055** youth served via outreach programs school/community sites (up 5%!) 

Total QAC Youth Served: **6,504 (up 37% overall)**
In Queen Anne’s County our youth are part of this culture of responsibility and change. Our most notable accomplishments in 2017:

- **7 youth** have full or partial college scholarships as a result of the 4-H Marksmanship skills
- **1 4H family** hosted 4H Youth from Japan for 3 weeks this summer in an international youth exchange program.
- **7 youth** were certified to be employed in Agriculture by completing the 24 hr. Federal Department of Transportation Youth Agricultural Safety Certification.
- Partnership with Kennard Elementary to provide Bay Awareness Programming for **488 youth**.
- Partnership with the Board of Education to expand Agricultural Literacy Education in the elementary schools.
  - Programs included: Agricultural History in Queen Anne’s County, embryology, Growing with Grains, and Ag-Sploration for **1,108 elementary youth**
  - Partnered with Board of Education and Agricultural Agencies and Organizations to create the first Ag Awareness Day—All 7th grade youth in the county attended a full day program on agriculture that was fully aligned with 7th grade science learning objectives—**735 youth served**
- Queen Anne’s county has the largest 4-H public speaking program in the state with **over 200 youth** preparing and presenting speeches at the club, county, regional and/or state level.
- We expanded the **U Learn Farm** at our week long county fair. Different species of animals and crops were highlighted each day with over **1,600 elementary aged youth** and parents participating in the experiential activities.
4-H & Youth Development

4-H'ers are leading a Revolution of Responsibility - a movement for positive change in every community in America including right here in Queen Anne’s County, MD! 4-H youth are a living breathing, culture-changing revolution for doing the right thing, breaking through obstacles and pushing our country forward by making a measurable difference in the community. This takes uncommon commitment and that is exactly what our youth have!

The UME 4H Program is responsible for identifying problems, opportunities and needs of adults and youth in Queen Anne’s county. The 4H educator and program assistant conduct non-formal experiential learning opportunities for diverse youth ages 5-18 and adult volunteers to meet these needs.

Total grant dollars and donations generated to support 2017 programming in Queen Anne’s County is $14,300

The value of the volunteer service hours to the county is $148,360

“Ever since I was young, I remember 4-H teaching me responsibility, caring for others as well as myself, and giving back to my community. As I have grown older, these morals have also grown inside of me, and show in my public life, and my private.”

Matthew age 16
Today, there over 53 active Master Gardeners and 21 interns in the county, working to further the mission of educating Maryland residents about safe, effective and sustainable horticultural practices that build healthy gardens, landscapes, and communities. The Maryland Master Gardener vision is a healthier world through environmental stewardship.

Queen Anne’s County Master Gardeners Volunteers work on a variety of projects in cooperation with local schools, government agencies, the green industry and civic and environmental organizations. Annually, Queen Anne’s County Master Gardeners volunteer over 3,300 hours of service and offer many classes that are free and open to the public. Additionally, outreach activities within the county include the Bay-Wise Residential Landscape Management, the Ask a Master Gardener Plant Clinic, Backyard Food Production programs and Pollinator programs.

Living within the Chesapeake Bay Watershed, Marylanders play a vital role in the health of our streams and tributaries. The Bay-Wise Residential Landscape Management program was developed by the University of Maryland as a part of the University of Maryland Extension Master Gardener program. Its purpose is to provide information and guidance to help people create healthier gardens and landscapes using sustainable practices. Over the course of 2017, the Queen Anne’s Master Gardeners Bay-Wise team certified 5 public and 15 residential gardens throughout Queen Anne’s, Kent and Caroline Counties. Along with certifying landscapes, for 11 years the Master Gardeners have maintained the Centreville Library Raingarden. This project provides storm-water management for the town of Centreville and the library property.

The “Ask a Master Gardener Plant Clinic” program provides diagnostic plant information to home gardeners. Master Gardeners look at samples of ailing plants to make diagnosis, give recommendations, answer questions, and provide printed information on a variety of gardening subjects. The “Ask a Master Gardener Plant Clinic” is held year round at the Kent Island Farmers Market and seasonally at the Chestertown Farmers Market. Each month Master Gardeners gear the booth on timely horticultural topics.

In addition to these programs, Master Gardeners offers the following programs to the residents of the county:

- Spring Plant Sale
- Information booths and panel speakers at community events
- Youth Gardening Programs (in the classroom as well as after school)
Maryland’s Food Supplement Nutrition Education (FSNE) program provides nutrition education to help low-income individuals and families make healthy food choices, develop food preparation skills, improve food shopping skills, and increase physical activity. FSNE partners with community collaborators at sites with the capacity to provide nutrition education opportunities as well as environmental or policy changes that will help individuals and families establish healthy nutrition and physical activity behaviors. FSNE also provides nutrition education training to volunteers and professionals who provide services to low-income families, thus expanding the reach of the program.

FSNE programming sites include schools, preschool and childcare centers, out of school program sites, farmers’ markets, and food assistance sites. Maryland’s FSNE program outcomes show positive results. Adult learners are developing better food shopping skills and eating more fruits and vegetables. FSNE youth programming helps participants become more willing to try new fruits and vegetables and increase their consumption of healthy foods.

In Queen Anne’s County, the work of FSNE educator Ashley McLaughlin is somewhat limited as not all schools meet the required income guidelines.

In 2017, FSNE partners included the Judy Center, Sudlersville Elementary School, Haven Ministries Food pantry (Kent Island),

2017 County Economic Impact

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<th>4-H Volunteers</th>
<th>$148,360</th>
<th>Nutrient Management</th>
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<td><strong>Total</strong></td>
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Don’t just get answers. Get solutions from someone you trust

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