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 2015.

The University of Maryland, College of Agriculture and Natural Resources programs are open to all and will not discriminate against anyone because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry, or national origin, marital status, genetic information, or political affiliation, or gender identity and expression.
Agronomy programs – Over 90% of the participants report that the session will benefit their farming operation. Participants report information and production practices that will be implemented following the program. These include: Improved pest management practices (35%), improved fertility management (55%), Improved crop production practices (58%), Use of risk management tools (22%), Regulatory information (27%), a new product or practice (24%). Agronomy meeting participants were also asked the expected profitability increase per acre due to knowledge and skills gained from Extension programming. The average participant increases profitability between $16.27 and $25.27 per acre. Using the average acres farmed per person the overall average profitability is $14,270.08 per person. Based on the 121,225 acres associated with the Agronomy Day program alone, the total estimated economic impact of this educator’s agronomy programs annually is ($20.27*121,225 acres) = $2,457,231.

Private Pesticide Applicator training: On average, participants attending the training increased their profit by $5.95 per acre. Based on the 121,225 acres associated with the applicators trained each year, the total estimated economic impact of this educator’s pesticide program annually is ($5.95*121,225) =$721,289.

Poultry Health/Biosecurity

A disease outbreak such as Avian Influenza (AI) in Delmarva’s poultry would economically impact poultry growers and processors, and in the case of H5N1 or H7N9 AI, would present potential human health risks. These diseases can cause epidemics on poultry farms, loss of export markets, and long expensive quarantines, resulting in large financial losses. While there has never been a case of H5N1 or H7N9 AI in the USA, wild birds, particularly waterfowl, are a natural reservoir of low pathogenic AI.

In addition to the financial impact of an AI outbreak, there is also a risk to human health with a high pathogenic form of AI. Although Highly Pathogenic AI H5N1 and H7N9 are not present in the U.S., the need for poultry growers to design and implement a strong biosecurity program to prevent the spread of AI and other economically important or zoonotic diseases is essential.
Nutrient Management

An Economic Value of nearly $105,000 to the Queen Anne’s County Agriculture Community

Queen Anne’s County has 120,302 acres that are harvested as 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 2015, the Queen Anne’s County Nutrient Management program through Nutrient Management Advisors Joe Dawkins and Craig Yohn, served 78 cooperators, through 410 plans collectively managing 21,486 acres (17.9% of Queen Anne’s County harvested cropland) (a value of $96,687). Further evaluation was completed on 65 fields for 15 cooperators on the use of phosphorous on high phosphorous fields. This evaluation of 1,186 acres (a value of $1,447.00) assured the environmentally sound use of phosphorous and in many cases saved cooperators input costs using manure over commercial fertilizer.

A pre-sidedress nitrogen test (PSNT) was conducted on 12 fields totaling 353.6 acres (a value of $120.00) that received manure to evaluate the need for additional nitrogen for the production of corn. This evaluation showed that 3,567 pounds of nitrogen did not need to be applied saving cooperators $1,784.00 in nitrogen costs.

A Fall Soil Nitrate Test is required before any nitrogen can be applied to small grain. The advisor conducted tests on 25 fields (a value of $250.00) totaling 834 acres. Seventeen (68%) of the fields totaling 535.8 acres were deficient in nitrogen allowing the application of up to 16,074 pounds of nitrogen that had a value to local commercial agriculture vendors of $4,556.00.

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 $2.10.
4-H & Youth Development

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

1,904 youth served through County 4-H Programs

325 youth enrolled in 14 traditional and special interest clubs

1,579 youth served via outreach programs school/community sites

447 volunteers with 5788 hours of service

Value of that service = $147,188.84
Most notable 4-H accomplishments in 2015:

- **5 youth** have full or partial college scholarships as a result of the 4-H Marksmanship skills.
- Completed Diamond Clover project - a **$25,000** swing/playground set at the 4-H park. Project planned, fund-raised and executed by a 4-H member.
- 3 4H families hosted 4H Youth from Japan for three weeks this summer in an international youth exchange program.
- Partnership with MD Agricultural Education Foundation & Maryland Grain Producers to provide an Ag Literacy learning lab trailer for a **3 day period** at Kennard Elementary.
- Partnership Board of Education to expand Agricultural Literacy Education in the elementary schools. Programs included: embryology, Growing with Grains, Exploration for **1383 elementary youth**.
- Partnership with the library system to provide outreach programming to those youth not traditionally involved with 4-H. Programs included: STEM, sewing, health and nutrition. **106 youth reached**.
- Partnership with the Chesapeake Bay Environmental Center to those youth not traditionally involved with 4-H. Environmental education programs reached **90 youth**.
- Traditional programs and workshops in the following areas offered to 4-H youth involved in club programming included: youth leadership training, communication skills, animal science training, poultry, rabbit and horse workshops, agriculture safety, and tractor school.
- USDA funded Partnership with USDA University Poultry Veterinarian, professional Videographers from Florida and in-kind support from QAC government create training videos for the prevention of Avian Influenza. A QAC 4H family was recruited, educated, and starred as actors in one of the videos. USDA will use all three videos for national training programs.
- **Anne Schnappinger**, first ever Maryland 4H Hall of Fame winner recognized for **40 years of service** to the county, state and national 4-H program.

Diamond Clover Project by Michael Lee. Michael planned, fundraised and executed the project. A $25,000 swing and playset for the 4-H Park.
Horticulture/Master Gardener Programs

Under the supervision and direction of the Horticulture/Master Gardener coordinator, Queen Anne’s Master Gardeners work to further the mission of educating Maryland residents about safe, effective and sustainable horticultural practices that build healthy gardens, landscapes and communities. There are 50 active Queen Anne’s County Master Gardener volunteers and 8 new interns who work on a variety of projects in cooperation with government agencies, the green industry and civic and environmental organizations. In addition to the many classes taught by Master Gardeners, Extension offers the following programs to the residents of the county:

- Spring Native and Vegetable Plant Sale
- Bay-Wise Consultations and Education
- Grow It, Eat It and Community Food Gardening
- Plant Clinics (Chestertown & Kent Island Farmers Market)
- Information booths and panel speakers at events such as: County based garden tours, Kent Island Day, Corsica River Awareness Day, various HOA meetings, community garden clubs, the county 4H Fair and more.
- Youth Gardening Programs (in the classroom as well as after school)
- Demonstration Gardens
- Master Gardener Basic Training

Continued collaboration with the developing Parks and Rec Open Space projects.

58 volunteers gave 1,768 hours of service

Value of those service hours = $40,788
Food Supplement Nutrition Education (FSNE) offers nutrition education programs to help Supplemental Nutrition Assistance Program (SNAP) households and those eligible for SNAP. FSNE programs are provided at no cost to support the work of community agencies serving SNAP-eligible individuals and families, such as literacy centers, local food banks, soup kitchens, WIC offices, senior centers, community centers, neighborhood groups, and homeless shelters. Many materials are available in both English and Spanish.

Food Supplement Nutrition Education (FSNE) programs reach students, teachers, and parents in low income communities including after-school sites, summer meal programs and public schools where 50% or more students qualify for free or reduced-price school lunch. The goal of the FSNE school-based programs is to integrate key nutrition messages into the school curriculum, policies, the lunchroom, and family shopping and meals.

Faculty and Staff for 2016

Francis Breeding
Agriculture Technician
fbreedin@umd.edu

Molly Garrett
FEA – Horticulture
mgarret1@umd.edu

Christine Johnston
Agent - 4-H
cjohnstn@umd.edu

Ashely McLaughlin
Nutrition Educator & Project Leader
amclaug4@umd.edu

Jennifer Rhodes
Agent – Agriculture
jrhodes@umd.edu

Sally Rosenberry
Program Assistant – 4-H
srosenbe@umd.edu

Sheila Shorter
Administrative Assistant
sshorter@umd.edu

Aly Valentine
Area Extension Director
valenta@umd.edu

Susan Wolff
Administrative Assistant
swolff@umd.edu

Casey Forman
Nutrient Management Advisor
cforema1@umd.edu


Anne Schnappinger, President
Iris Carter

Patricia Rhodes, Vice-President
Michael Clark

David Clark, Treasurer
Mark Sultenfuss

Jim Persels, Secretary
Hannah Story, Youth Member