



Eaton County

2017 ANNUAL REPORT

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MESSAGE FROM THE DISTRICT COORDINATOR

Michigan State University Extension serves the residents of Eaton County through the educational process that applies knowledge to critical issues, needs and opportunities. In 2017, MSU Extension Educators, Program Coordinators, Program Instructors and support staff have all played a role in delivering information to help our farmers, school children, teachers, caregivers, consumers, homeowners, business owners, visitors, workers, parents, government officials, home gardeners, entrepreneurs, those battling chronic disease and those seeking better health, improve their lives and the lives of those they serve, lead and follow. As you read through this annual report, you will see examples of many of the programs and participants from our communities. MSU Extension's four institutes: Agricultural and Agricultural Business, Children and Youth, Health and Nutrition, and Greening Michigan all played a role in this year's programming.



Bill Hendrian, District Coordinator
Serving District 8 (Eaton, Clinton, Montcalm, Gratiot, Ingham and Ionia counties)

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MISSION:

Michigan State University helps people improve their lives through an educational process that applies knowledge to critical issues, needs and opportunities.

MEASURING IMPACT

CONNECTING WITH RESIDENTS

Health & Nutrition Participants.....	137
4-H 2016/2017 Program Participants.....	948
4-H Clubs Members.....	700
4-H Special Interest/Enrichment Participants.....	57
4-H Volunteers	191
Agricultural/farm visits/soil tests/reviews and other contact.....	851
Eaton County Office/phone calls/emails and in-person contacts....	9,745

DISTRICT 8 DIGITAL REACH

From July 1, 2016, to June 30, 2017, the MSU Extension website (msue.msu.edu) received over 10,000 visits from Eaton county. A majority of those, were first-time visitors. The easily accessible and searchable science-based content make the MSU Extension website one of the most visited Cooperative Extension Systems education sites in the country.

MSU EXTENSION'S EXPANDED DIGITAL REACH

Through combined face-to-face trainings, online webinars, social media, website interaction and electronic newsletters, MSU Extension has made more than 12.1 million connections. More than 149,000 adults* and 212,000 youth† participated in MSU Extension programming in the 2016-17 programming year.

More than 5.3 million people viewed more than 9.8 million pages on the MSU Extension website.‡ Of those, more than 1 million were Michigan residents. MSU Extension remains one of the most visited Cooperative Extension System education websites in the country.

MSU Extension also distributes a series of electronic newsletters that cater to residents' unique interests. Last year, nearly 1.9 million newsletters covering 90 topic areas were distributed to

about 53,000 email addresses.§ You can sign up for these informative newsletters by visiting msue.msu.edu and clicking on "Newsletter Sign Up" or texting MSUE to 22828.

MSU Extension uses social media channels to reach people with educational content. Currently, Extension reaches more than 4,300 Facebook followers and more than 3,200 Twitter followers.‡ In addition, Michigan 4-H families and volunteers stay informed about activities through social media channels, including on Michigan 4-H Facebook with more than 4,700 likes and on Twitter with more than 1,456 followers.

*From ES237 Federal Report – Oct. 1, 2015, to Sept. 30, 2016

†From Michigan Extension Planning and Reporting System – Jan. 1, 2016, to Dec. 31, 2016

‡From July 1, 2016, to June 30, 2017

Developing Youth and Communities



4-H is America's largest youth development organizations. 4-H offers interactive learning opportunities for youth to gain valuable life skills.

"The most powerful leadership tool you have is your own personal example."

-John Wooden



MICHIGAN STATE UNIVERSITY | Extension



Developing youth and communities

4-H is America's largest youth development organization, providing educational opportunities to over 6 million youth. The 4-H program offers a vast selection of project area topics—science, healthy living, arts, and civic engagement to name a few, all with hands-on experiential learning for youth. 4-H programs are available for all youth ages 5-19, and are made possible by the service of our dedicated volunteers. We always welcome new members and new volunteers; if you are interested in joining 4-H, please contact the Eaton County/MSU Extension office at (517)543-2310 or email the Eaton County 4-H Program Coordinator, Kristy Oosterhouse, at oosterh6@msu.edu. We would be happy to help you enroll today!



Preparing For the Future



When you support MSU Extension 4-H programs, you are giving local youth the opportunity to prepare for an ever changing future in education and technology in a fast paced and changing world.



4-H prepares youth for the future

Each year, Eaton County 4-H sends youth to the Michigan State University campus to learn about the University and to help them explore opportunities to further their education. In 2017, 39 Eaton County youth attended Exploration Days.

4-H Exploration Days is a pre-college awareness program for youths ages 11-19. It is held on the campus of Michigan State University. Youth and chaperones spent 3 days at MSU, lived in a dorm, ate in the cafeteria and attended Exploration Days classes of their choice. Class sessions ranged from learning how to play a sport, learning how to weave a basket, learning a new language, learning how to show a chicken, open a checking account, or learning about college admissions.

Renewable Energy Camp is another learning opportunity held on the campus of Michigan State University. Michigan has abundant natural resources. Emerging technologies are changing the face of energy. As the supply of non-renewable energy sources has become more limited and in some cases more controversial, there has been a steady shift to renewable, sustainable energy. The Renewable Energy Camp is designed to :

- Educate youth on current issues and technologies impacting energy and the environment within Michigan's agricultural sector.
- Explore the scientific process and develop problem solving and critical thinking skills through team work and hands-on learning.
- Expose youth to degrees and careers in the field of renewable energy, science and technology.
- Develop and expand career and personal interests.
- Foster participants' ability to meet new people and make new friends from different places and backgrounds.
- Develop social and academic skills needed for a successful transition to college and life as an adult.

Developing Youth Skills



When you support MSU Extension 4-H programs, youth participants learn life skills that prepare them for the workforce – especially for highly sought after jobs in science, technology, engineering and mathematics (STEM).

4-H develops innovators

4-H members age 13 to 19 and volunteers had the opportunity to learn about robotics. Two tracks were offered covering Unmanned Aerial Systems for the older youth and Robotics for Younger 4-H'ers. Science-based activities such as these promote career exploration in the areas of STEM and agriculture while teaching youth life skills.

4-H'ers learn:

- Identify how robots are used today.
- Explore the benefits of robots.
- How remotely operated vehicles are used and where they function.
- Understand the basic elements of mechanics such as the role of the lever and the gear.
- About sensors and discover how they are used to create responses.
- About movement and friction.
- Discover scientific inquiry and engineering design processes



Supporting Food and Agriculture



When you support MSU Extension, you help participants learn profitable and efficient business and production practices.



Eaton County—A strong agricultural producer

Michigan agriculture continues to be a growing sector of the state's economy. Although Michigan may be best known for its specialty fruit, vegetable, and floriculture industries, field crops comprise the largest cropping sector in Michigan in terms of acreage, farms, farmers, and income. Field crops grown in Michigan include soybeans, corn, alfalfa/ hay, wheat and small grains, as well as important specialty row crops like potatoes and dry beans. Michigan's diverse livestock industry is also a significant component of the state's agricultural industry. The economic impact of livestock and dairy products accounts for 37% of the total economic impact of Michigan's agricultural products.

Addressing agriculture pests and disease

Educating growers on the presence of Potato Late Blight and its impact to their business and discussing the latest strategies to fight against and prevent it, getting the word out in regard to the new disease Dickeya black leg were some of the topics that came up at numerous Consultants breakfasts hosted by MSU Extension Educator, Fred Springborn. Fred also held four pest management and pesticide review sessions in 2017. Of the attendees surveyed, Fred found that over 80% reported learning something that would reduce their risk in the coming season and 62% indicated that they learned something that would increase profitability. As pests such as the Brown Marmorated stink bug get closer to the dry bean area, up-to-date information and research is critical. The MSU Extension Field Crops Team provides research-based knowledge to address the needs of field crop producers including strategies for managing production risks and advancement of efficient farming practices that enhance profitability while protecting soil and water resources. Participants learn how to optimize and reduce the use of pesticides and fertilizers, and how to conserve and protect water resources. This education leads to better use of time, money and human capital, and helps retain and create agricultural jobs.

Supporting Food and Agriculture



When you support MSU Extension, you help ensure that agricultural assistance is provided through educational programming and individual contacts.



Providing up-to-date evidence-based research

Drone Technology Workshop - A workshop was held to consider aerial imaging using drones versus small aircraft and satellite imagery for natural and agricultural resource monitoring and management. A presentation was given titled “Ultra high resolution multispectral imagery acquired from drones and small aircraft and its applications in agriculture.” The program was intended for farmers, crop consultants, service providers, educators and officials in public and private agencies. The program addressed issues such as:

- What does the technology offer to farmers at the moment?
- In a climate of low commodity prices, are farmers still better off in investing in this technology?
- What can farmers do incrementally if they want to start small?

Ongoing Field Research - Field research continues to be important for farmers to help them discover proper applications and maintain and increase yields which have a direct impact on the Michigan economy and the farmer’s bottom line. For example, MSU Extension Educator, George Silva stated, in regard to soybean farmers that “there is merit for ongoing on-farm research towards identifying site-specific factors and practices that would contribute to consistent soy bean yield responses.” George makes many on-site farm visits and visits with producers and the general public at the Eaton County MSU Extension office in Charlotte, Michigan. In regard nitrogen rate application and corn yields, some of the research being done with partners may lead to achieving 300 bushels per acre and Silva says, “would be a significant milestone for corn producers in terms of profitability.”



Supporting Food and Agriculture



When you support MSU Extension, you help to provide resources that growers and producers rely on.

Farm business management

Michigan State University Extension Educator, Roger Betz helps farmers improve their bottom line by providing financial education that farmers can put to use. Roger helps farmers plan how to make and save money, how to do a business analysis and learn how to manage income taxes. He also provides information that helps farmers think through and plan for farm succession.

Telfarm Tax Management— Farm producers enroll in the MSU Extension Telfarm Record system and meet with professionals toward the end of the tax year to manage their taxable income. Knowing when to sell products, buy products and make capital improvements help the small and big farmer improve the bottom line. The small farmer on cash accounting benefits greatly and in general, farmers have more variability in net income from year to year than nearly any other businesses. On average in 2017, farmers who developed tax management strategies after attending the program experienced tax savings of \$17,649 per family.

Family Farm & Business Succession— Farm families and farm business often experience difficulty developing effective mechanisms and strategies to transfer management skills and assets to the next generation. Financial security, family harmony and tax implications all make farm succession planning very difficult. Roger Betz meets with farm families on a regular basis to help them develop sound strategies to successfully transfer business skills and responsibilities to the next generation.



Supporting Dairy Farmers



When you support MSU Extension, you help participants learn profitable and efficient business and production practices.



On-site training, farm visits and general education

MSU Extension Dairy Educator, Faith Cullens, and her colleagues provided education and consultation throughout 2017 to help improve the lives of local dairy farmers. There were educational opportunities for employers, employees and the general public to learn about the important issues facing Michigan's Dairy Industry and the parts played by both producer and consumer. 2017 included:

- **Spanish for Dairy Farmers** - This program included 6 weeks of instruction for a limited class size. The classes were taught by a Spanish speaker to help participants learn common phrases used on the farm, as well as help with pronunciation and sentence structures.
- **Dairy Nutrition Roundtables** - Roundtable discussions were held for new information as well as common experience to be shared.
- **Animal Handling** - Presentations in regard to the importance of passive transfer on calves.
- **Antibiotic Use** - Presentations and discussion on the prudent use of antibiotics for dairy animals.
- **Farm Visits** - Visits to local farms to assess feeding systems or in some cases to include out farm business management colleagues to assess the financial strength of local operations.



Keeping People Healthy



The Supplemental Nutrition Assistance Education Program (SNAP-Ed) teaches participants how to establish healthy eating habits and increase their time spent being physically active, while staying within a limited food budget.

Teaching valuable healthy-eating skills

More than 1.3 million Michigan residents receive Supplemental Nutrition Assistance Program (SNAP) benefits. MSU Extension's Supplemental Nutrition Assistance Program Education (SNAP-Ed) programs including Cooking Matters, Project Fresh, Healthy Harvest and Show Me Nutrition teach adults how to make the most of their food dollars, by developing skills such as menu planning, understanding recipes and keeping food safe. Participants learned about the nutrition and health benefits of foods to feed their families in healthy ways. In 2017, Eaton County MSU Extension nutrition programs were able to:

- » Graduate 91 Eaton County adults and 33 youth from a six week evidence based class on eating healthy and increasing physical activity.
- » Provide one time nutrition and physical activity sessions and workshop presentations.
- » Provide information and referral processes for evidence based nutrition programs to agency contacts.



Ensuring Safe and Secure Food



Food safety and preservation programs provided to Eaton County residents, help to stimulate the local economy by encouraging locally grown and purchased foods.



Michigan
Fresh

Reducing foodborne illness through education of individuals and small businesses

The National Institutes of Health estimates that every year, 48 million people in the United States become ill and 3,000 die from pathogens in food. Causes range from outdated home food preservation practices to unsafe sanitizing practices at public events and small businesses. Since 2013, MSU Extension food safety and preservation programs have taught almost 10,500 Michigan residents safe food handling, food preservation and methods to reduce foodborne illness.

Participants include youth, nonprofit organizations that prepare food for the public and food preservers who want to create safe products for their small businesses.

Through face-to-face programming provided by Extension Educator, Joyce McGarry, and online learning, Eaton County participants receive high-quality, research-based education using U.S. Department of Agriculture guidelines for safe food preservation.

Food preservation online course

It is important for individuals to stay up to date on the latest research for home food preservation, recipes and processing times, as they are constantly under review and being updated. MSU Extension's Online Home Food Preservation course is a self-paced program that instructs science based recommended methods for safe home food preservation, regardless of a person's experience with preserving foods.

This course will help people avoid dangerous, life-threatening contamination of foods. Individuals will feel confident in processing their produce and feeding their families safe, healthy foods. Home food preservation stimulates the local economy by encouraging locally grown and purchased foods and for individuals and families to grow their own gardens.

This course includes a variety of preservation methods and skills from drying foods, using a dehydrator, freezing and blanching which requires little time or equipment, to a more advanced pressure canning. Each of the seven segments discusses the equipment and tools needed to safely process food.

Collaboration to Meet Needs



Your local office is housed with experts in particular fields. One of the advantages of having four MSU Extension Institutes is the ability to bring together deep and broad knowledge to address issues that are multifaceted and complex.

Collaboration across MSU Extension

One of the advantages of having four Institutes within MSU Extension is the ability to bring together deep and broad knowledge to address issues that are multifaceted and complex. For example, MSU Extension Educators, Program Instructors and Program Coordinators have worked together on physical and financial health issues, agricultural and stress issues, economic, community development and conservation, and issues that affect both young and old.

Your local office is housed with experts in particular fields. Individuals may serve in the Agricultural and Agribusiness Institute, the Children and Youth Institute, the Health and Nutrition Institute or our community and natural resource sustainability institute—the Greening Michigan Institute. However, even if you do not have a local expert for the Extension issue that you need addressed, we draw from a statewide pool of experts to make sure you have the information that you need. In addition, the MSU Extension website www.msue.msu.edu is maintained and updated on a regular basis. In addition, we are always looking for ways to collaborate with each other to apply knowledge to the critical issues you face.



Extension Professionals Serving Eaton County

Staff Located in the Eaton County Office:

Name	Role	Phone	Email
Kristy Oosterhouse	4-H Program Coordinator	517-543-4420	oosterh6@msu.edu
George Silva	Field Crops Senior Educator	517-543-4467	silvag@msu.edu
Roger Betz	Farm Management Educator	269-781-0784	betz@msu.edu
Rebecca Henne	Health & Nutrition Institute	517-543-4468	henner@msu.edu
Heather Dyer	Health & Nutrition Institute	517-543-4405	dyerh@msu.edu
Norma Lundeen	Health & Nutrition Institute	517-543-4465	nlundeen@msu.edu
Anne Pease	Office Manager	517-543-2310	peasea@msu.edu



Additional MSU Extension Staff Serving Eaton County:

Name	Role	Phone	Email
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Katie Courtade	4-H Supervising Educator	616-527-5357	courtad3@msu.edu
Diane Brown-Rytlewski	Horticulture Educator	517-676-7292	rytlewsl@msu.edu
Faith Cullens	Dairy Educator	989-224-5249	cullensf@msu.edu
Charles Gould	Bioenergy Conservation Educator	616-994-4547	gouldm@msu.edu
Kevin Gould	Beef & Livestock Educator	616-527-5957	gouldk@msu.edu
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MISSION:

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