

Gratiot County 2017 ANNUAL REPORT

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MESSAGE FROM THE DISTRICT COORDINATOR

Michigan State University Extension serves the residents of Gratiot 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. We are grateful for the opportunity to serve our stakeholders and partners.

Bill Hendrian, District Coordinator Serving District 8



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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

DISTRICT 8 DIGITAL REACH

From July 1, 2016, to June 30, 2017, the MSU Extension website (msuc.msu.edu) received 5,999 visits from Gratiot county. Of those, 79.3 percent 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



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).

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 Gratiot County/MSU Extension office at 989-875-5233 or email the Gratiot County 4-H Program Coordinator, Chris Thompson, at thom1367@msu.edu. We would be happy to help you enroll today!

4-H learning opportunities

Gratiot County 4-H provided local members and volunteers opportunities to connect to learning experiences both locally and beyond the County lines. These included:

- 4-H Exploration Days-29 Gratiot County youth attended this pre-college awareness program for youth ages 11-19 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 they chose. Class sessions ranged from learning how to play a sport, weave a basket, learn a new language, show a chicken, open a checking account, or meet with a college admissions office.
- <u>Kettunen Center</u> Kettunen Center, in Tustin the site of 4-H trainings throughout the year. Workshops included Winterfest; Challenge U; Teens as Teachers; Shooting Sports; Visual Arts, Crafts, Clothing, and Textiles.





4-H Youth Development

Whether it is written, spoken or visually represented, the way we express ourselves makes a big impact on our daily lives at home, work and play.



Lessons, skills gained and people impacted by 4-H

- 4-H Summer Camp-The 4-H Summer camp at 4-H Camp Coldwater is held each July in partnership with the Isabella and Gladwin 4-H programs. The DNR held a presentation on "The Mammals of Michigan" and CMU brought their "Play on the Way" activities. There were also sessions on outdoor survival skills, water quality and the scientific process.
- <u>4-H Cloverbud Day</u>— Excited young 4-H Cloverbuds (5 to 8 year-olds) attended the Gratiot County Fair for Youth in July for a day of fun. They attended sessions on healthy eating, horticulture, archery and crafts. The highlight of the day for most was the trip to the Alma High School Pool. These young 4-H members are always excited to graduate to the ranks of the "normal" 4-H members at age 9.
- Science Expo- The Science Expo held each year during the Kid's Day activities at the Gratiot County Fair for Youth was started by a 4-H member several years ago. This year, the mantle has been handed to another generation of 4-H leaders as Chloe Brittain took the reins for the event. She worked with the Fair Coordinator and 4-Program Coordinator to provide a wide selection of booths that allowed the participants to take a hands-on approach to science.
- <u>Commodity Carnival</u>- The Commodity Carnival activity is used to introduce the
 concepts of agribusiness, marketing, livestock raising and commodities to youth
 through an interactive game. Participants learn about the variables of agricultural
 production and market fluctuations.
- National 4-H Congress—This 5-day event engages high school aged 4-H members in leadership, citizenship, global awareness, and inclusion. Participants not only have the opportunity to participate in state-of-the-art educational workshops and hear from world-renowned speakers, they have the opportunity to network with other 4-H members from across the United States.

Supporting Food and Agriculture



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

Gratiot 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 sugar beets 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.

The 2012 USDA Census of Agriculture, the most recent report available, stated that the market value of agricultural products sold from **Gratiot County** was \$345,033,000. This means that Gratiot has the 6th highest value of agricultural products in the state. Of this number, \$199,091,000 is the value of crops (6th highest in the state), and \$145,942,000 is the value of livestock, poultry and their products (5th highest in the state).

For individual crop or livestock categories, Gratiot is:

- #3 in number of pullets for laying flock replacement
- #3 in number of turkeys
- #4 in value of poultry and eggs
- #5 in Michigan in acres of soybeans (80,543 acres)
- #5 in number of hogs and pigs
- #5 in number of cattle and calves
- #6 in value of milk from cows
- #7 in number of acres of wheat
- #7 in number of acres of corn

The MSU Extension Field Crops Team provides research-based knowleds 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



Raising Awareness of Food Production Practices & Technology

In 2017, Extension Educators, Marilyn Thelen and Paul Gross, provided critical agricultural expertise for Gratiot county. They hosted several events and partnered with Alma College to take a group of 23 students on a tour of local farms. The group was accompanied by three professors from the science, policy and advertising departments. The students, all freshman, were enrolled in various majors and only two in the group had any farm background.

The group was divided into two and were taken by vans to the various stops. The drive between stops gave opportunity for discussion on topics such as soils, sustainability, water quality, practices and technology. The freshman students were given an opportunity to look at food production through a wareness to perhaps they were not accustomed to. The tour also brought awareness to science based research on topics such as crop breeding, soils and cover crops. It was also was an opportunity for the educators to raise awareness of sustainability practices and environmental management in agriculture.





Supporting Food and Agriculture



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Extension

AgBioResearch



Enviroweather

Enviroweather Weather Data and Pest Modeling aims to help users make pest, plant production and natural resource management decisions in Michigan by providing a sustainable weather-based information system. This online resource provides 'local' weather information and weather-based tools. There are currently 78 weather stations throughout Michigan (each yellow dot on the mp)

An Enviroweather station is located in Gratiot County near Ithaca. Each station provides readings every 30 minutes on air temperature, soil temperature, soil moisture, relative humidity, solar radiation, wind speed and direction, precipitation, leaf wetness. There are different components of Enviroweather that deal specifically with field crops, fruit, vegetables, trees, turfgrass, and landscape/nursery.

Weather influences crop and pest development and management decisions. For example, wind speed and direction for drift management, temperature to prevent phytotoxicity that may result from applications on hot days, insect and pathogen development are all influenced by weather.

Model predictions allow growers to prepare to take management action if necessary. Enviroweather tools are intended to assist, not dictate, management decisions. The decision to take management action should be influenced by several factors including: a history of problematic pests, the current season pest pressure, susceptible crops, and past and predicted weather events.

Enviroweather is a collaborative project of: Michigan Climatological Resources Program & the MSU Integrated Pest Management Program. It is supported by: Project GREEEN, MSU AgBio Research, MSU Extension, private donors, and the MSU departments of Crop and Soil Sciences, Entomology, Forestry, Geography, Horticulture, and Plant Pathology.

Information in this article was taken from "Using Enviro-weather to assist pest management decisions", a presentation at the 2014 Integrated Pest Management Academy by Emily Pochubay, Fruit Integrated Pest Management educator for MSU Extension.

Breakfast on the Farm



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

2017 Breakfast on the Farm in Gratiot County:

Breakfast on the Farm (BOTF), a program of Michigan State University Extension since 2009, educates consumers about modern agriculture. Since 2009, more than 80,000 visitors and volunteers have experienced life on a modern farm. Events have been held on dairy, beef, apple, potato and field crop farms in 27 different counties since 2009. On August 19, 2017, the De Saegher Family Dairy in Middleton, was one of two Michigan farms selected to host this event in 2017. De Saegher Dairy is a family farm, owned and operated by the De Saegher family, who moved to Michigan from Belgium in 1999. When they first moved to the U.S., they milked 35 cows. Now they own four large dairy farms in Michigan and milk 13,000 cows. The event attracted 2,490 visitors.

"We really want to show consumers how milk is produced on a modern dairy farm and answer all of their questions," said Lotte De Saegher. "It's important to us that we showcase our standard of excellence in caring for our animals, the environment and in producing a safe and nutritious product."













Supporting Dairy Farmers



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

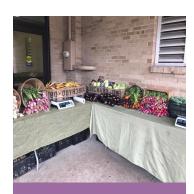
On-site training, farm visits and general education

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.
- <u>Dairy Nutrition Roundtables</u> 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.
- <u>Farm Visits</u>— Visits to local farms to assess feeding systems or in some cases to include out farm business management colleagues to asses the financial strength of local operations.



Keeping People Healthy



Senior Project
FRESH/Market
FRESH originates
from U.S.
Department of
Agriculture funding.
It is part of the
Senior Farmers
Market Nutrition
Program in the Farm
Bill.

Improving nutrition for Michigan seniors

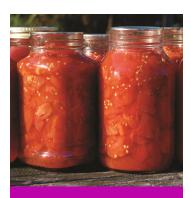
Senior Market FRESH/Project FRESH in Michigan provides seniors who qualify with unprocessed, fresh Michigan-grown produce from registered Farmers Markets and roadside stands throughout Michigan. In Michigan, Senior Project FRESH is managed by the Office of Services to the Aging. MSU Extension provides nutrition classes and distributes coupons. To qualify, a senior must be 60-years of age or older, have total household income of 185 percent of poverty or less, and live in the county where the coupons are issued.

Vegetables and fruits offer important vitamins and minerals to keep us healthy. Most of these foods have little fat and no cholesterol, and are a good source of fiber. Eating more fiber may help with digestion and constipation, and help to lower cholesterol and blood sugar.

Senior Market FRESH is free for seniors and for participating farm markets. It allows seniors to benefit from eating more fresh fruits and vegetables during the summer and helps boost Michigan's local economy. The coupons can only be used at Farm markets and not at grocery stores or supermarkets. Eligible items that can be purchased include any Michigan-grown fruit or vegetables such as strawberries, lettuce, cabbage, blueberries, cucumbers, peppers, carrots, squash, tomatoes, watermelon, apples, potatoes, onions, beans, etc., as well as honey and some herbs.

Through the partnership with the Gratiot County Commission on Aging and Michigan State University Extension, over 100 Gratiot County seniors were provided with the \$20 coupon books in 2017. These coupons provided extra dollars to local seniors for fresh fruits and vegetables, and meant additional income for our local Farmers Markets and growers. RoxAnne White, a SNAP-Ed Program Instructor with MSU Extension was in charge of providing the educational component and coupon distribution at senior centers throughout the county. The eligible seniors were very happy and grateful to receive the coupons.

Ensuring Safe and Secure Food



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

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.

[The 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, Gratiot 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 promeended 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.

Educating for Financial Capability



MSU Extension
understands that
healthy economic
structures lead to
greater
opportunities and
stronger
communities.

When you support MSU Extension, participants learn personal finance skills and the communities benefit from homeownership education and foreclosure prevention. MSU Extension helps youth and adults alike learn the skills they need to increase their savings, manage their spending id predatory lending and reduce mortgage defaults. All of these outcomes help lower the cost of governmental services and lead to personal and community stability, strong neighborhoods and safe communities.

Financial Education

Whether it's handling credit card debt, investing for retirement or college funds, purchasing a new home, avoiding foreclosure, or simply wishing to have more control over personal finances, MSU Extension's Senior Educator, Brenda Long, helps Michigan residents in all aspects of money management. She and her team assist individuals, households, organizations and communities to become more sustainable spenders through education focused on financial capability. MI Money Health is a website that provides Michigan residents with access to noncommercial, easily accessible, and reliable personal financial information.

In Gratiot County, Financial & Housing Senior Educator, Brenda Long, provided group and one-on-one Education. Brenda also provided training to front-line social workers who work directly with clients that encounter numerous financial problems. In addition to face-to-face classes, we offered numerous homeownership, foreclosure and financial education programs online. We continue to provide the highest quality, unbiased financial and homeownership education to any Michigander who desires to participate.



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 specialization is a deep and broad knowledge of subject matters related a particular discipline, such as field crops. 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. For example, MSU Extension Educators and Program Instructors have worked together on physical and financial health issues, agricultural and stress issues, economic and community development and conservation issues, and issues that face 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 that 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 Gratiot County

Staff Located in Gratiot County Office:

| Name | Role | Phone | Email |
|----------------|-----------------------------------|--------------|------------------|
| Kami Paksi | County Support | 989-875-5333 | paksi@msu.edu |
| Erica Rogers | Environmental Management Educator | 989-875-5296 | roger392@msu.edu |
| Diane Smith | Product Center Educator | 989-875-5293 | dismith@msu.edu |
| Joan Taylor | County Office Manager | 989-875-5234 | tayl1182@msu.edu |
| Chris Thompson | 4-H Program Coordinator | 989-875-5295 | thom1367@msu.edu |



Additional MSU Extension Staff Serving Gratiot County:

| Name | Role | Phone | Email |
|-----------------------|-------------------------------------|--------------|------------------|
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| Joyce McGarry | Food Safety & Preservation Educator | 517-887-4587 | mcgarry@msu.edu |
| Brad Neumann | Land Use Educator | 906-475-5731 | neuman36@msu.edu |
| George Silva | Field Crops Senior Educator | 517-543-4467 | silvag@msu.edu |
| Fred Springborn | Field Crops Educator | 989-831-7509 | springb2@msu.edu |
| Bonnie Zoia | Comm. & Civic Engagement Educator | 989-345-0692 | zoiay@msu.edu |

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