MESSAGE FROM THE DISTRICT COORDINATOR

Each year the District Coordinator has the pleasure of compiling and presenting the St. Joseph County MSU Extension Annual Report to the County Board of Commissioners. Although I strive to communicate with the County throughout the year about programs and impacts MSU Extension is having in the community, the annual report provides a chance for me to formally thank the County Board and County Administration for their continued support and partnership. Without the financial and logistical support of St Joseph County, MSU Extension would not be able to do the great work we are doing to improve the quality of life in the county. In this report you will find examples of the work we have done together in 2016 to support commercial agriculture (the largest economic driver in the county) strengthen families, develop youth, protect natural resources and build prosperous communities. I welcome your comments and feedback on the report as well as on our plans for the coming years. You can find many more stories and programs about MSU Extension on our excellent website at www.msue.msu.edu. It is a pleasure working in St Joseph County.

Julie Pioch, District 13 Coordinator

MISSION:

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

FUNDING

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Staff Located in St. Joseph County Office:

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<th>Name</th>
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<tr>
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<tr>
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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). Extension programs help children develop early literacy skills that support school readiness. They learn leadership and decision-making skills in 4-H that increase their likelihood of becoming civically active.

4-H’ers also demonstrate reduced high-risk behaviors such as drug use, and learn to complete tasks, solve problems and seek any help they might need from peers and adults. 4-H involvement also helps participants avoid or reduce involvement with the court system. This helps ensure more young people succeed in school, attend college and contribute to their communities. More successful young people in communities means greater tax revenues and consumer spending and increases the likelihood that young people will stay in, or return to, their communities.

A new STEM based club started in St. Joseph in 2016:

- The new 4-H Clover B.O.T.S. (Clover Builders Of Technology & Science) is a club that began with five interested youth and has grown to over 15 in a matter of a few months. These youth are investigating, building, and developing ROV robots, EV3 robots, and a host of other “Junk Drawer” robots that have piqued their interest. They meet two times a month working and building with a lot of enthusiasm for this project. Their desire to learn and to share their knowledge of the wonderful world of science with others is infectious and fun to watch!

Growing true leaders

With innovative ideas, exuberant energy and the ability to look beyond preconceived obstacles, youth have the capacity to change the world. However, many lack the skills and confidence to empower these assets into motion. They need experiences and training that help them to feel ready and capable to lead.

Michigan 4-H helps to prepare current and future leaders by offering numerous opportunities for leadership development. From the club experience to statewide youth councils, all youth have the chance to serve in a leadership role. Those experiences and various leadership trainings provide youth with skills to last a lifetime and empower them to stand up today as true leaders in their families, schools and communities.

Each year the St. Joseph County leaders are required to attend an educational program along with getting their leader update materials. This year Eva Beeker provided the concept of youth-adult partnerships. This was the third workshop she conducted for the leaders in the County. Leaders were positive about the opportunity to work differently with youth and were energized about how 4-H youth could engage on local leadership...
opportunities.

Building communication skills for a lifetime

Communication is an essential element of every aspect of life – personal and professional. Whether it is written, spoken or visually represented, the way we express ourselves makes a big impact on our daily lives while at home, work and play. Youth who practice and enhance their communication skills in adolescence will use these skills to their advantage in future employment and adulthood.

To help young people develop this important life skill, MSU Extension’s Michigan 4-H has made communication an aspect of nearly every area of its programming. In St. Joseph County youth are required to record their progress on projects, verbally report their activities and illustrate their understanding in a number of ways. Face to face interviews are held for programs such as Citizen Washington Focus; written applications are completed for State awards (five this past year) and youth practice presentation and public speaking skills during showmanship events at the county fair.

Support for 4-H grows here!

St. Joseph County 4-H is a very fortunate and supported program. We started off the year with completing the 1:1 match with the Michigan 4-H Foundation to create a “Make the Match” permanent endowment fund that will provide annual support for the current 4-H program delivery, the future 4-H program enhancements and other areas of greatest need that would service to advance delivery of 4-H in St. Joseph County. This was a huge undertaking and was successful due in part to the dedicated committee that saw the need and opportunity and moved forward to make it happen.

Our youth numbers have increased by 5% from 2014-2015 for a total of 775 enrolled and the adult volunteers have increased by 7% for a total of 232 active leaders. We have 32 active 4-H clubs in the county that serve the enrolled youth.

Non-traditional youth development program highlights

Eva Beeker continues to offer educational opportunities to youth outside the 4-H program on her own as well as bring experts from around the state. In 2016:

- A nine-week course on “Build Your Future” was offered each semester to the youth. This program challenges the youth at the Juvenile Detention Training Program (JDT) to look at the options of their future employment. What types of jobs they are interested in? What skills they will need to be successful? What education is needed? Basic resume and interview skills are being taught as well.

- The “Interviews for Success” program was a two hour course offered to high school seniors in Centreville, Colon, Three Rivers, and White Pigeon schools. The course focused on up to date interviewing skills to prepare students for their senior exit interviews as well as scholarship and job interviews. This program has impacted
approximately 437 students to date.

- In partnership with the St. Joseph County Parks and Recreation, St. Joseph County Conservation Department, and the City of Sturgis MSUE hosted 750 students at the Covered Bridge Park for the 4th-5th Grade Conservation Tour.

- We attended the Michigan State University Exploration Days for a three-day/two-night event on the University campus. There were 43 youth and six adults that were able to experience the event with close to 2,600 other youth and adults. This event was packed with hands-on learning and fun for those involved.

- As a continuing program, we offer a three-day/two-night 4-H camp for youth 7-12 years of age. During this camp we offer the typical camping experience with swimming, hiking, and campfires. As part of the 4-H experience, we also offer 4-H project exploration, and host an educational speaker on wildlife. This past year we had 33 campers with 12 teen leader counselors.

We are broadening our scope and minds to include those who want to think outside the box of 4-H. This past year has been a very busy one. The thought now is: What is in store for 2016-2017?
Ensuring Strong Communities

When you support MSU Extension, participants learn how to implement best practices in good governance that keeps communities solvent, productive and engaged; learn effective conflict management skills that help leaders and residents work collaboratively on complex issues; and engage youth leaders in decision-making. In the personal finance area, MSU Extension helps youth and adults alike learn the skills they need to increase their savings, manage their spending avoid 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.

First Impressions - A Program for Community & Tourism Development in Sturgis

The First Impressions program was developed in 1991 by the University of Wisconsin Extension to help communities learn about their existing strengths and weaknesses as seen through the eyes of first-time visitors. The program’s results can be used to inform economic and tourism initiatives. Michigan State University Extension, in conjunction with Extension Services in several states, is working to adapt this program to meet the needs of Michigan communities. In partnership with the Sturgis Area Chamber of Commerce, an assessment was completed in October of 2015 for Sturgis and a final report with recommendations was presented to the community in May 2016. This effort was led by MSU Extension Educator Andy Northrop of St. Claire County. He reported that the community took immediate steps to implement some of the recommendations to improve the economic experience for travelers and businesses in Sturgis.

The summary report was based on the observations of tourism and community development faculty from Michigan State University Extension. Extension faculty invited the Sturgis, Michigan community to participate in the pilot of this program in late 2015 for the purpose of tailoring the program to Michigan communities. The assessment team was asked to provide perceptions of Sturgis before they arrived and to undertake online research for planning their visit. The visitors traveled to Sturgis and recorded their experiences driving and walking through Sturgis, visiting stores, restaurants, outdoor spaces, and other places. The pilot program evaluated community characteristics including appearance, amenities, and access. Key findings were presented to Sturgis officials, local organizations and interested community members (30 people in all). A few of the recommendations included creating a cohesive online presence; creating destination development; improving branding and marketing. The complete report and presentation is available directly from Andy at northrop@anr.msu.edu.
Improving Leadership in Michigan communities

MSU Extension’s government, leadership, and community engagement programs engage participants in learning skills of good governance, how to communicate with purpose, and how to collaborate on solving complex issues in order to improve their communities. Participants leave MSU Extension educational programs with a deeper understanding of their civic responsibilities and roles within their own communities; increased confidence to make decisions; skills and information to better manage community resources; knowledge of how to implement best practices; and understanding of the importance of building quality places in Michigan. The application of knowledge and skills gained from good governance programs builds stronger civic infrastructure.

New County Commissioner Training

From maintaining records of property ownership to issuing marriage licenses to collecting and distributing taxes to providing a functional and effective justice system, county government is responsible for handling an array of functions for Michigan residents. Every two years, the citizens elect county commissioners to develop policy and provide financial oversight to all aspects of county government. The role of a county commissioner is well defined by statute; however, understanding the relationships between the county board and other elected officials and department heads is very complicated. We are training commissioners so that they understand their roles within the complex system of county government.

Newly elected County Commissioners need a solid foundation from which to work. The taxpayers of Michigan, who demand quality services from the administrators, other county elected officials and staff, care about how the county is managed and demand that county commissioners understand their roles and responsibilities. Since 1968, MSUE has offered an educational program for new county commissioners following the November election. In 2016, a team of MSUE educators offered the workshop at seven locations around the state. A total of 213 people attended the workshops, three from St. Joseph County. Based on immediate post-workshop evaluation, 86 of reporting participants were newly elected county commissioners. Overall, 92% indicated that they found the program valuable for their professional (or personal) growth and development and 75% reported feeling more or much more confident to successfully complete their term as an elected (or appointed) official.

Open Government and Effective Meetings

The Open Meetings Act was the topic for Wendy Walker, Extension Educator from Cass County, when she spoke with nine board members and four staff of the St. Joseph County Commission on Aging in November 2016.

Julie Pioch worked with the Sturgis and Three Rivers Chambers of Commerce to teach Effective Meetings for Community Leaders—the last session of the St. Joseph Leadership Academy in May 2016.
Keeping People Healthy

When you support MSU Extension, you help participants learn safe food handling practices, increase their physical activity and improve the quality of their diets. Extension programming also helps decrease incidents of violence and bullying. Encouraging these healthy behaviors helps reduce food and health care costs by helping prevent chronic health conditions and providing safe environments throughout a person’s life span.

Improving nutrition and increasing physical activities in Michigan communities

Limited income and poor nutrition affect quality of life and can increase health care costs. The Centers for Disease Control and Prevention reports that more than 30 percent of Michigan adults are considered obese, and one out of every three deaths in Michigan is caused by cardiovascular disease, influencing the quality of life and adding billions of dollars each year in economic burden.

MSU Extension delivers affordable, relevant, evidence-based education to help residents in urban and rural communities stay healthy throughout their life spans. Programs teach participants how to buy and prepare nutritious, budget-friendly foods and increase physical activity. In 2016 alone, these programs reached more than 112,000 adults and youth across the state in over 1,600 different locations.

- 79% of youth participants improved their abilities or gained knowledge about how to choose foods according to Federal Dietary Guidelines.
- 79% of adult participants made a positive change in at least one nutrition practice, such as preparing foods without adding salt, or using the Nutrition Facts labels to make food choices.
- 73% of adult participants made a positive change in at least one food resource management practice, such as planning meals in advance or comparing prices when shopping.

In St. Joseph County, Linda Kline, Health and Nutrition Institute Program Associate, partnered with case management staff to bring the Eat Healthy-Be Active nutrition curriculum to county probationers. The St. Joseph County Swift and Sure Sanctions Probation & Parole Program is an intensive community supervision program focusing on high-risk felony probationers. The goal of SSSPP is to increase compliance with probation terms by imposing certain swift and consistent sanctions for probation violations. Participants may be ordered into treatment, Sober Living Homes, Probation Centers and/or self-help groups as a condition of their probation.
SNAP Education Reinforces Healthy Nutrition Habits and Skills

The Supplemental Nutrition Assistance Program (SNAP-Ed) consists of six-week series and one-time presentations to county residents who receive or are eligible to receive food stamp benefits.

2015-2016 Statistics for St. Joseph County include:

- 107 adults and 238 youth completed a six week program; 369 adults and 443 youth attended one time presentations reinforcing healthy nutrition habits and skills.

Creating Healthier Child Care Environments, also known as NAPSACC, was offered for the first time in 2016 for eligible child care centers and homes in St. Joseph County. The Sturgis Christian Child Care Center staff participated in the series which encourages centers and homes to set goals after completing a detailed assessment of their child care setting. This center chose to seek ways to improve their playground areas, increase the nutrition education of their students, and inform parents of healthier food choices.

As a result of participating in the Healthier Child Care Environment workshop, the Sturgis Christian Child Care Center’s pre-school/kindergarten classrooms participated in Show Me Nutrition, a six-week series encouraging children to make healthier food choices. Fourteen children participated, trying new or unfamiliar foods including a fruit and yogurt parfait at the last session.

Additional program locations included the St. Joseph County Public Schools, the Community Action Agency Sturgis and White Pigeon Head Starts, the Great Start Parent Coalitions, the Intermediate School Districts Young Adult Programs in Sturgis and Three Rivers.

Partnering Parent Education with Nutrition is a Success in St. Joseph County

Linda Kline, Suzanne Pish of Branch County, and the St. Joseph County Prevention of Child Abuse and Neglect Council provided diversified education to St. Joseph County Juvenile Court. This bundled program consisted of eight-week classes for parents of teens who are involved with the Juvenile Court system. It was designed to teach nutrition for the entire family, help them to understand and manage their anger, manage stress, develop communication skills, and to make positive behavioral changes while building their parenting skills through a program called RELAX. The goal of RELAX: Alternatives to Anger is to help young
people, parents and caregivers foster healthy relationships so they can live, learn and grow in a safe, affirming and fair environment free from violence, abuse, bullying and harassment. Youth, parents and caregivers will learn to better manage their anger and stress at home and in the workplace. Through presentations, group discussion and skill-building activities, participants learn what anger is, what triggers anger, calming down and de-stressing methods, the principles of problem solving, effective communication skills and forgiving and letting go of the past.

**Diabetes Prevention Education**

The estimated cost of diabetes in Michigan is $10.5 billion each year, including medical care and lost productivity. This figure is expected to triple over the next 25 years, reaching $21.6 billion by 2040. It is estimated that the state can save $545 million spent across all chronic diseases by investing $10 in preventive care per person per year. Your support of MSU Extension benefits participants and the community by moderating the increase in health care costs associated with caring for a growing population of people with diabetes and other chronic health conditions.

A new partnership was formed in 2016 with the St. Joseph County Commission on Aging. With the opening of the Sturgis Enrichment Center, Commission On Aging and MSU Extension partnered to offer nutrition and diabetes education to county seniors. Cooking Matters, and Dining with Diabetes, two workshop series providing nutrition and diabetes education as well as cooking demos, were planned for both the Sturgis Enrichment Center and the Commission on Aging Center in Three Rivers.

**Promoting Local Agriculture**

**Project Fresh**, a partnership with the Branch-Hillsdale-St. Joseph County Health Department, provided educational sessions about the health benefits of eating fresh fruits and vegetables at the Three Rivers office. These sessions encouraged pregnant mothers and parents of children ages 1-5 to purchase fresh fruits and vegetables from participating farmer’s markets. Eighty-four adults participated in the sessions held in June and July.

The “Ag-Citing” Experience took place again at the St. Joseph County Grange Fair. This is a collaborative effort between the Grange Fair and the entire staff of MSUE. Third grade classrooms throughout the county are offered to participate during fair week where they are educated regarding the link between the farm animals and crops raised with the food they eat. This includes visiting the 4-H animal barns, the horticulture exhibit and the Master Gardener’s garden. Some participating schools later continue with the Show Me Nutrition curriculum during their school year. This adventure is enjoyed by both students and adults. Some adults even comment that they learned a lot!
Making the Most of Our Natural Assets

When you support MSU Extension’s natural resources education programs, participants learn about income-generating opportunities, ecological principles, natural resource issues and the role of natural resource professionals. They also explore public policy issues related to environmental stewardship. Our programs can lead to increased income for families that retain their natural resource assets, help landowners become better stewards of their land, and protect land management opportunities for future generations. Better land stewardship benefits communities by protecting and enhancing Michigan’s natural resource assets.

Introduction to Lakes Online 2016

Michigan is blessed with more than 11,000 inland lakes. Each provide unique recreational, scenic and environmental benefits. These inland lakes are complex ecosystems, and are often negatively impacted by both the people that live near them as well as the water that drains into them. Frequently, local communities struggle to protect and manage inland lakes in a way that incorporates the best available knowledge and resources. Concerned citizens, decision makers, local leaders, resource professionals and lakefront property owners learn about inland lake management and protection by enrolling in the MSU Extension Introduction to Lakes six week online course. The course is specially designed for citizens and professionals interested in learning about inland lakes from the comfort of their home or office. Participants have 24/7 access to six online units complete with closed captioned video lectures, interactive activities, additional resources, discussion forums, quizzes, and live chat sessions with classmates and Michigan State University Extension experts. The 2016 Intro to Lakes online course had 152 registrations from 42 Michigan counties and 8 other states - a nearly 50% increase over 2015. Participants indicated they were lakefront property owners, local elected officials, educators and lake professionals and citizens. Three graduates of the program this year were from St. Joseph County. Evaluations from the program revealed:

- 85% planned to use the course information in future local management efforts.
- 71% had never participated in a MSUE program prior to taking Intro to Lakes and 98% indicated they would use MSUE for lake resources and training in the future.
- 85% volunteered time to a lake association, local conservation district, watershed council or their related organization, while 93% planned to adopt this activity after taking course.
- 80% participated in local water monitoring efforts, while 87% planned to participate in this activity after the course.
- 78% of participants educated others about lake and stream stewardship prior to the
Making the Most of Our Natural Assets, continued

course and 89% planned to educate others after the course.

Raising awareness of the benefits of cover crops

Cover crops are a hot topic in agricultural circles, thanks to an MSU Extension specialist’s message that’s resonating with the right crowd. Dean Baas, a senior research associate based in St. Joseph County, conducts cover crop and organic agriculture research and education.

Cover crops are plants seeded into agricultural fields, either within or outside of the regular growing season, with the primary purpose of improving or maintaining ecosystem quality. Environmental benefits include enhanced biodiversity, increased soil infiltration and attraction of honeybees and beneficial insects.

Researchers are focusing on ways cover crops can be used by farmers to bring diversity to the crop system; to reduce reliance on fertilizers, herbicides and pesticides; and to determine the impact of cover crops on overall operation economics.

Initial studies have shown that:

- Farming benefits include reduced erosion, improved soil quality through increased porosity, soil organic matter and water-holding capacity, as well as the addition of beneficial microbes.
- Cover crops help retain nutrients that otherwise would be lost.
- Cover crops add nitrogen through fixation while combatting weeds and breaking disease cycles.

Inter-seeding Cover Crops Spring Review

Due to the challenges of establishing cover crops planted after corn and soybean harvest, farmers have become increasingly interested in methods for inter-seeding cover crops into standing cash crops. A follow-up field day to the 2015 Inter-seeding Cover Crops field day was held April 12, 2016 to allow stakeholder to see spring growth on the cover crops that were demonstrated the previous fall on the Larry Walton Farm near Nottawa, Michigan. The program was a tour of the plots and fields with a discussion of the spring results. Due to spring planting, participation at this event was low. However, the 12 attendees stimulated valuable discussion as they evaluated the additional benefits that cover crops inter-seeded prior to harvest can have throughout the non-cash crop portion of the season including the spring growth.
Michigan agriculture continues to be a growing segment of the state’s economy. The production of commercial food and nonfood agricultural operations is growing rapidly. The number of households raising a portion of their own food and raising livestock or gardening for pleasure or relaxation continues to increase. When you support MSU Extension, you help participants learn profitable and efficient business and production practices. Participants also 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. These measures strengthen Michigan’s economy while connecting farmers to local food opportunities and global markets. In this way you help MSU Extension encourage growth in a sustainable and prosperous Michigan food and agriculture system.

**Ag Educational Programing and Outreach in St. Joseph County—Dr. Eric Anderson**

- Integrated Pest Management—a series of breakfast meetings at the Royal Café in Centreville from April through June where farmers were presented with regional crop updates as well as presentations from a number of MSU specialists, including Dean Baas and Lyndon Kelley (locally) as well as other guest speakers. This comprised the largest single effort during the first year that reached over 100 attendees and resulted in several MSU Extension articles, newspaper articles, and radio segments. This was an important meeting series as it provided local farmers direct access to the expertise that MSU specialists provide to the state. Local agri-businesses sponsored these events with cash donations totaling $1,600.

- Published periodic email updates to local farmers and agribusinesses highlighting upcoming MSU programming and other timely information important for crop producers.

- Regional Integrated Pest Management (IPM) Update in Cass County

- Cover Crops Field Day (St. Joseph)

- Ag Action Day (Kalamazoo)

- Branch County Farmer’s Day

- Corn Production Practices in Rough Economic Times (Berrien)

- Two Pesticide Applicator Training sessions to prepare both private and commercial applicators for the Pesticide exam.

- Co-hosted the MSU Field Crops Webinar Series, an online version of the IPM Update meetings for those farmers who could not attend the in-person regional meetings.
- Presentations on hay economics at the Focus on Forages meeting and on soil testing and reading a soil test at a pasture field day.

- Field Research: Conducted a collaborative on-farm research project involving MSU Specialist and Field Crops Educators to investigate the impact of tillage (residue management) and rotation, among other variables, on soybean production and soil health parameters.

- Collaborated with several Extension educators and MSU Crops Specialists to conduct on-farm research for corn stover harvest at four locations in Michigan.

- Conducted an initial field investigation with the Centreville FFA staff looking at the feasibility of producing conventional corn versus glyphosate-tolerant corn in a herbicide free system.

- Conducted on-farm sampling of soil for pre-side dress nitrate tests to gauge mineralizable nitrogen in the soil (from manure applications and/or legume cover crops) to help farmers better understand how much nitrogen needs to be applied to raise the most profitable corn corp.

- Provide one-on-one assistance to local farmers and landowners, entrepreneurs and the general public by answering questions and providing recommendations on agriculture and agri-business related topics.

- Represent agriculture on a team of MSU faculty and Extension personnel focusing on climate change.

- Participated and represented MSU Agriculture at the Career Fair at Sturgis High School.

- Hosted and presented at numerous Irrigation workshops throughout the region.

### Protecting the Environment on Michigan Livestock Farms

Shelby Burlew, Animal Agriculture Educator housed in Hillsdale County, was invited to White Pigeon Township Hall to speak to Township Supervisors from Burr Oak, Colon, Constantine, Fabius, Fawn River, Florence, Flowerfield, Leonidas, Lockport, Mendon, Mottville, Nottawa, Park, Sherman Sturgis and White Pigeon at their August 2016 meeting of county supervisors. She provided a program entitled “Protecting the environment on Michigan Livestock Farms—How Farms Deal with Manure, Nutrients, Odors and Neighbors.” The supervisors requested this program based on recent concerns expressed by residents regarding large hog and poultry facilities being sited throughout the County. The program’s goal was to increase awareness about Michigan’s Right to Farm protection including the Manure GAAMPs and Siting GAAMPs, MDEQ’s permitting process for Confined Animal Operations and the Michigan Agriculture Environmental Assurance Program. Participants received reference information to help them discuss these issues with residents.
Training Michigan’s next Master Gardeners

Nearly 70 percent of Michigan households engage in some type of gardening: 6.7 million Michigan gardeners are putting their green thumbs to work. However, without science-based gardening information, Michigan gardeners might not enjoy the full fruits of their efforts. More importantly, their lack of knowledge could negatively affect Michigan’s water quality, food security, soil health and pollinators such as bees and butterflies. MSU Extension’s Master Gardener Program addresses those potential issues through trusted, research-based gardening education.

- In 2016, 609 Michigan residents from 44 counties attended MSU Extension Master Gardener basic training courses. Additionally, six public webinars took place to discuss a variety of topics ranging from “Protecting the Power of Pollinators” to “Gardening in Urban Soils.”
- 2,881 MSU Extension Master Gardeners (EMGs) from 74 counties provided 162,818 volunteer hours and reported an additional 336,449 contacts with Michigan residents in 2016.
- 30 St. Joseph County Master Gardener volunteers clocked a minimum of 450 hours of volunteer service to St. Joseph County and attended a minimum of 5 hours of Advanced Master Gardener training sessions to re-certify as volunteers in 2016.

MSU Extension Lawn and Garden Hotline

Through the MSU Extension Lawn and Garden Hotline, Michigan residents are able to ask questions related to vegetable gardening, landscape plants and associated problems, houseplants and household pests as well as fruit, soil evaluations and diagnostic evaluations. They are able to discuss problems with trained hotline staff that include Extension Educators, Master Gardener volunteers and local county staff. Providing university research based information that helps them make informed decisions that impact quality of life, family, business, community and the environment.

- 447 residents from District 13 (22 from St. Joseph) were reported as using this service.

The MSU Extension State Hotline is open Monday through Friday throughout the year running six hours per day from April through September and at three hours per day in the off season October through March. The hotline is answered at six county MSU Extension sites that where hotline staff is overseen by Consumer Horticulture Educators.

The State Hotline staff answered over 26,000 questions in the last four years and 7,800 in 2016. These questions from the public are often concerning plant problems with the caller seeking information to make informed decisions on how to manage the issue. Our staff using research-based information educate the caller on the specific issue and often direct them away from pesticide use, provide them with information on the least toxic material that can be utilized, educate them on cultural practices that help to avoid plant pest
problems or reduce the pesticide use by spot treatment. Working with consumers seeking direction on pesticide use, our staff is able to direct them away from treatments or a reduction in use through spot treatments about 13 percent of the time. Also another 13 percent are directed to correct timing of a pesticide which can mean better results and less pesticide needed.

**MSUE Responds to Swine Flu at County Fairs**

Swine influenza, sometimes referred to as swine flu, is a virus that commonly circulates in the pig population. Influenza viruses are classified by the types and further classified by strains. Like people, pigs are susceptible to many strains of flu. Swine influenza is a zoonotic disease and can occasionally be transmitted to humans. Human infection with flu viruses from pigs are most likely to occur when people are in close proximity to infected pigs, such as in pig barns and livestock exhibits housing pigs at fairs. Exhibitors and caretakers are those at highest risk and should be following proper biosecurity to protect themselves and their animals.

During the fair and exhibition season of 2016, MSUE animal agriculture educators responded to 3 incidences of swine influenza outbreaks at county fairs in Southwest Michigan. Along with responding to these outbreaks, a plan was put into place to help other fairs prepare for possible outbreaks and instill basic biosecurity practices to help manage some of the risks associated with the virus. MSU Extension Educators and specialists were charged with preparing educational information, helping fairs respond to outbreaks and design communication materials for fair goers and consumers. A variety of written materials were prepared in response to the virus outbreak and put on the internet: recommendations for biosecurity and response plans, Tip sheets for consumers, fair visitors and fair boards, cleaning and disinfecting recommendations and barn closure signage.

Educators worked with individual fairs to guide them through the response process and helped others best prepare for animal health issues. Phone calls, visits and emails were exchanged with fair leadership, volunteers and parents to help them prepare. Exhibitor meetings were also held all to help minimize the spread of the virus. Weekly conference calls were scheduled and held for local fair boards and swine superintendents to help them understand the situation and implement different practices into their operations. Communication between MSUE, local and state health departments, CDC, MDARD, MAFE and local fair boards was critical during these events. MSU Extension was also involved with helping CDC with their text response survey system in Michigan.
Grazing Cover Crops and Benefits for Livestock on Cash Crop Ground Workshop

Local livestock producers expressed interest in an educational session about the opportunity to graze livestock on cover crops grown by crop producers. This event was a collaborative effort between St. Joseph County MSUE, Van Buren County Conservation District and the Kalamazoo County NRCS office. Dean Baas participated in the planning and promotion of the event.

This workshop was held on March 7, 2016 at the Centreville High School Ag Classroom and Barn in Centreville MI. The event was attended by 34 participants predominately from St. Joseph, Cass, Van Buren and Kalamazoo Counties. A highlight of the program was a presentation by Mike Buis, Ontario farmer and grazing specialist, who has been seeding cover crops into cash crop ground and then grazing his cattle for over 10 years now. He presented about the species used, timing, applications & lessons learned from his farming operation. Presentations were delivered on NRCS programs and Grazing Cover Crops. The event ended with an open question and answer session. This workshop stimulated a lot of discussion about the benefits and challenges that grazing livestock on cover crops grown on other producer’s farms.