MICHIGAN STATE



St. Joseph County 2017 **ANNUAL REPORT**

msue.msu.edu



MESSAGE FROM THE DISTRICT COORDINATOR

It is my pleasure to present the 2017 Annual Report to the St. Joseph County Board of Commissioners. It has been another great programming year with outstanding work taking place in the county, throughout my district and in the state. As always, I want to thank the commissioners and county administration for your continued support of our educational programs. We have a strong team assembled in St. Joseph County. Local educators, together with educators throughout the state,



CONTACT US 612 E. Main St. Centreville, MI 49032 (269) 467-5511

(269) 467-5641

msue.anr.msu.edu



are offering educational programs to St. Joseph County residents. You will see much of their work highlighted in this report. Since October we have partnered with the St. Joseph County Parks and Recreation Department by providing administrative support to the Parks Director and his team. We continue to reach people not only in face-to-face programs, but also through our web-based classes and through timely articles on the MSU Extension website. Please feel free to contact me anytime to talk about our educational programming in the county. Cheers to another successful year!

Julie Pioch, District 13 Coordinator

Michigan State University Extension Staff Serving in St. Joseph

Name	Role	Phone	Email
Dr. Eric Anderson	Field Crops Educator	269-467-5510	eander32@anr.msu.edu
Dr. Dean Bass	Cover Crops Educator	269-467-5646	baasdean@anr.msu.edu
Eva Beeker	4-H Program Coordinator	269-467-5516	beekere@anr.msu.edu
Lyndon Kelley	Irrigation Educator (MSUE & Purdue)	269-467-5651	kelleyl@anr.msu.edu
Linda Kline	Food & Nutrition Program Associate	269-467-5666	klinel@anr.msu.edu
Tonya Barrington	Program Aide	269-467-5521	franzt@anr.msu.edu
Ginny Sutton	Program Aide	269-467-5522	suttonvi@anr.msu.edu

Find other experts in MSU Extension at www.msue.msu.edu





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

Developing Youth and Communities



In 2017 St. Joseph County had 721 youth enrolled in 4-H with an additional 2780 youth participating in other **4-H enrichment** activities. There are 31 active 4-H clubs in St Joseph County with 371 committee and caring adult volunteers managing, nurturing and leading those club activities.

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 results in greater tax revenues and consumer spending and increases the likelihood that young people will stay in, or return to, their communities.

2017 4-H Exploration Days

Forty-seven youth and adults from St. Joseph County attended the 4-H Exploration days at MSU. The event was three days and two nights, held June 21-23. There were 2,800 youth in attendance from around the state. St. Joseph County had five State Award Delegates. A State award is the highest award a 4-H member can receive at the state level. The county's State Award delegates were: Senior Division, Hannah Harless (Companion Animals), Erica Eggleston (Rabbits and Cavies). At the Junior Division, Jacie King (Goats), Andrew Rambadt (Swine), and Alyssa VanLoo (Biological Sciences). Hannah Harless and Alyssa Van Loo were 2017 State Award Winners in each of their categories.



Developing Youth and Communities, continued



Fair Frenzy Scavenger Hunt 2017!

The St. joseph County 4-H Youth Council held a Fair Frenzy Scavenger Hunt for our St. Joseph County youth. Each team had to include one youth 9-11, one youth 12-14 and two youth 15-19. Prizes were given out to the top three teams.

Local 4-H Program Highlights for 2017

- In 2017 St. Joseph County had 721 youth enrolled in 4-H with an additional 2780 youth participating in other 4-H enrichment activities.
- There are 31 active 4-H clubs in St. Joseph County with 371 committee and caring adult volunteers managing, nurturing and leading those club activities. One new club the 4-H Clover B.O.T.S (Builders of Technology and Science) was started in 2017.
- 35 adult volunteer training meetings were held in the county by the 4-H program coordinator Eva Beeker including regular monthly meetings with committees and also specific leadership training for her volunteer leaders in such topics as financial management and leadership skills.
- MSUE Educators from around the state brought their expertise to St. Joseph County including: The 4-H Ag Innovators experience brought to the St. Joseph County 4-H Summer Camp Program by Betty Jo Krosnicki who taught 53 youth about soil health; Connie Lange taught Officers trainings and parliamentary procedure.
- Our 4-Hers attended training workshops and competitions held throughout the state such as: Livestock Education (Sheep, Dairy, Beef and Swine), 4-H Horse Shows, Exploration Days, Goat Shows, Dog Obedience, Shooting Sports, many species judging competitions; money management.
- One St. Joseph Youth attended 4-H Animal and Veterinary Science Camp at MSU in June. The purpose of the camp is to provide youth opportunities to explore fields relating to animal and vet science; develop problem solving and critical thinking skills through hands-on research activities; gain animal handling skills. One of the results of this camps is that 100% of youth agreed to having confidence in completing a college degree. This program is one of several summer camp program MSU Extension offers for career exploration and introduce and prepare them for college.

50th Anniversary of Conservation Tour

Milestones were reached in 2017 with the 50th anniversary of " Conservation Tour" for area 4th and 5th grade students. With more than 700 students in attendance from 11 school districts. St. Joseph County had nine public schools and two private schools participate. Students spent 15 minuets at each of seven learning stations. The stations included wildlife appreciation, woodland wisdom, pond ecology, soil conservation, birds of prey, forestry in Michigan and beekeeping. The annual Conservation Tour is directed by Eva Beeker, St. Joseph County 4-H Program Coordinator with the help of St. Joseph County Parks and Recreation Department, City of Sturgis, St. Joseph County Conservation District and the St. Joseph County MSU Extension Office. The many volunteers were given a lunch and mementos of appreciation including T-shirts sponsored by St. Joe H@O. Michigan Milk Producers of Constantine provided milk for the volunteers and students.

Developing Youth and Communities, continued



"When I arrived in Japan, it was overwhelming. I thought, "Oh my goodness, it is really happening!" The first week I got homesick since it was my birthday, so I missed home. My host family made my birthday celebration really nice though. I feel like the homesickness was part of the process since it was different being in a new culture. When it was time to say goodbye, I was very emotional. "

4-H Youth Shares Her Experience in Japan

Michigan 4-H International Exchange Programs offer many exchange programs including outbound exchange in partnership with States' 4-H International with headquarters in Seattle, Washington. The Japanese exchange program has a 44-year relationship with our partner organization, LABO, in Japan. Learn more about how this partnership has enriched a Michigan youth's 4-H experience.

Have you ever thought about traveling around the world as a youth without your family? Are you curious to learn about other cultures and how others live? Fourteen-year-old Libby Graber from St Joseph County did just that. She wanted to learn about other cultures and see how others lived. On July 12, 2017, Graber boarded an airplane for the first time for an adventure of a lifetime. Enjoy her reflection of the experience.

D: How did you prepare to travel to Japan?

L: I watched a lot of YouTube videos about how to fit everything in a suitcase and what it is like to be in an airplane since I had never flown before. I studied Japanese with books I purchased off Amazon, a children's dictionary and how to read and write Japanese. I also held fundraisers to raise money for the trip. My most successful fundraiser was holding a meal at my church. I also sold firewood, farm fresh eggs and sold rabbits and a goat at our county fair auction.

D: How did you pay for your trip?

L: I earned the money myself. My mom wanted me to learn how to work and save money over a long period of time for something I wanted. I started earning and saving for a year and a half. I also was awarded a 4-H scholarship through the Michigan 4-H Foundation and the St. Joseph County 4-H Youth Council.

D: How was flying to Seattle for your orientation?

L: I boarded the airplane in Detroit for my first time flying. I was aware of everything going on and I was taking it very seriously. We arrived in Seattle for our orientation with the whole group traveling to Japan from the United States. There were 30 of us all together. I made some new friends from different states; Olivia lives in Wisconsin and She is from Missouri. The States' 4-H staff prepared us for our experience in Japan. We were given information about where we would be staying, chaperones' phone numbers and LABO camp information. Eight of us would be at LABO camp together.

D: What did you hope to experience during your exchange?

L: I was hoping to experience daily life and notice big differences between the two countries, but there were not that many.

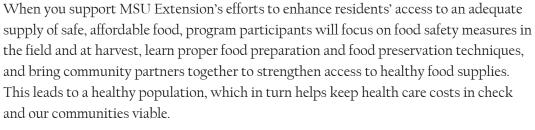
D: How will you use this experience back in your community?

L: I have presented to St. Joseph County Youth Council, Rolling Clovers 4-H club and my church family. I share my experience with anyone who asks. I will put it in a portfolio or on my resume. This experience will make me more employable. It will help me in the future.

Ensuring Safe and Secure Food



MSU Extension efforts in ensuring safe and secure food lead to a healthy population, which in turn helps keep health care costs in check and our communities viable.



MSUE Programs Focus on Prevention of Foodborne Illness in St Joseph County

Michigan State University Extension food safety education programs train participants to prevent incidents of foodborne illness associated with unsafe food handling practices.

ServSafe is a national certification program offered by MSU Extension for people who work in food service. Research has shown that those food establishments who have a certified food safety manager have fewer food borne illness outbreaks.

Topics covered in the ServSafe training include food safety, personal hygiene, temperature control, preventing cross-contamination, cleaning and sanitizing, food preparation, storing food, hawing, cooking, cooling and reheating food.

• 3 foodservice managers working at businesses in St. Joseph county participated in MUE's 8 or 16-hour ServSafe courses offered in southwest Michigan in 2017.

FSMA Produce Rule Grower Training





The Food Safety Modernization Act (FSMA) regulates growers of fresh produce in the United States for the first time in history. A greater awareness of food safety on the farm will lead to safer food and a decrease in foodborne illnesses. Produce growers have obtained the required certification to comply with the Food Safety Modernization Act (FSMA) requirement by attending a MSUE Produce Safety Alliance Training between November 2016 and August 2017. One grower received certificates in St. Joseph County.

Michigan Cottage Food Law

Michigan's Cottage Food Law permits those with an entrepreneurial spirit the chance to sell certain foods, made in their home kitchens, to the public at local farmers' markets. The workshops that were offered by MSU Extension combined the business and food safety features of preparing and selling cottage foods safely and successfully. In the workshop participants learned what foods can be legally produced as well as how to label and sell them. MSU Extension Educators provided techniques to develop and maintain a successful small business. Two St. Joseph county residents attended programs held in Marshall and Kalamazoo in 2017.

Ensuring Strong Communities



MSU Extension develops and delivers training in quick response to legislation that requires local governments to make significant public policy decisions such as regulating medical marijuana facilities held in 2017. 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.

Regulating Medical Marijuana Facilities: A Workshop for Local Government

MSU Extension developed and delivered this training in quick response to recent legislation that requires local governments to make significant public policy decisions on barring or accepting and regulating five new types of commercial medical marijuana facilities. This series of workshops in early 2017 trained over 846 individuals state-wide. The team followed up across the state with on-demand programming for communities who wanted to host the workshop. Finally in the fall of 2017 the MSUE team developed a webinar version of the program which included legislative updates necessary for community decision making related to medical marijuana facilities. The follow up programs reached another 200 community leaders. Nearly 90% of evaluation respondents reported feeling more confident or much more confident to address this topic in their community as compared to before the workshop.

• 7 St. Joseph County Leaders participated in one of these programs.

Michigan Citizen Planner: Fundamentals of Planning and Zoning Course

Local communities that proactively plan to succeed in the New Economy can improve their quality of life and lead Michigan's recovery and transformation. The Citizen Planner Classroom Program is delivered locally to provide a convenient way for busy volunteer community leaders to obtain the latest technical knowledge and skills they need to perform their duties more effectively and responsibly. MSU Extension also offers online and webinar versions of the course along with the Master Citizen Planner webinar series for continuing education. One St. Joseph County appointed official completed the selfpaced on line version of the seven session program in 2017.

Ensuring Strong Communities, continued



Elections and appointments of new local officials create an ongoing need for MSUE training programs that address the fundamentals of local government, including the best possible processes for making and implementing decisions, effective meeting techniques for fostering enhanced work within the government and improved public engagement.

Training and Updating Local Leaders

St. Joseph County elected leaders participated in sessions taught by MSU Extension public policy educators in Lansing this year including a session on communicating through conflict as part of the Farm Bureau Legislative Leadership Program and an Energy Policy update with the Michigan Association of Counties. Parliamentary Procedure training for township clerks, treasurers and supervisors was provided for 4 township leaders from St. Joseph County in partnership with the Michigan Township Association at their meetings in Frankenmuth during summer 2017. MSUE educators also assisted the Three Rivers and Sturgis Chambers of Commerce Leadership Program and Glen Oaks Community College Staff by offering sessions on parliamentary procedure.

Planning and Zoning For Solar in Michigan: A Primer for Local Governments

In fall 2016, the Michigan legislature amended the Clean and Renewable Energy and Energy Waste Reduction Act (PA 295 of 2008) with passage of PA 342 of 2016 requiring electric providers to achieve a renewable energy credit portfolio of at least 15% by 2021. Additionally, the cost of electricity from solar has dropped by nearly 75% since 2009, and is expected to fall 66% further by 2040, by some accounts. With such events and trends, owners of large tracts of property in Michigan and local governments are seeing increased activity among solar energy developers exploring options for solar energy development.

In response, MSUE educators held three trainings across the state in November 2017 to provide an opportunity for local government officials to learn about steps and considerations for planning and zoning for solar energy development. Programs held in Traverse City, East Lansing and Vicksburg resulted in attracting 93 participants **(24 from St. Joseph County)** identified as local planning officials, interested citizens, solar developers and utility representatives. Topics covered in the program included: The Context of Solar Energy Development, including the new Michigan law and the state of the industry; Introduction to Types/Scales of Solar, including Michigan examples; Local Government Planning Approaches for Solar, with emphasis on planning for marginal lands first; and Zoning Tools and Techniques for Solar, including siting and feasibility concerns.

Keeping People Healthy



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. 435 Adults and 649 Youth received nutrition education this past year.

Improving Nutrition and Increasing Physical Activities in Michigan Communities

Limited income and poor nutrition affect quality of life and can increase healthcare 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.

Between October 1, 2016 and August 31, 2017 MSU Extension provided interactive direct nutrition education to a total of 118,466 unduplicated individuals from across Michigan through the SNAP-Ed program. Out of the total number of participants reached with direct nutrition education (YTD) 86% were SNAP eligible participants (n=101,356). Our goal for the year is to reach at least 65,000 SNAP eligible youth and adults with direct nutrition education. As of August 31th we had reached 156% of our outreach goal for the year. The total number of contacts with SNAP-eligible participants (units of service) through direct education YTD is 320,379.

- SNAP-Ed programming has been conducted at 1657 different venues throughout Michigan, including summer SNAP-Ed programming at camps, fair grounds, summer feeding sites, and parks.
- Additionally 1,533,068 individuals have been reached year-to-date with nutrition education through indirect methods, such as written nutrition materials delivered face-to-face and nutrition messages sent through electronic media and radio PSAs.

SNAP-Ed Impacts in St Joseph County

Nutrition Education taught throughout St. Joseph County within schools and working with numerous agencies, teaching health and nutrition to clients. During the 2016-2017 program year:

- 435 Adults completed a 6 week series or were present for a one-time presentation
- 649 youth completed a 6 week series or were present for a one-time presentation

Partnering with Great Start Collaborative

Linda Kline, Health and Nutrition Institute Program Associate, partnered with the St. Joseph County Great Start Collaborative by providing nutrition education with the Great Start Parent Coalition. The Parent Coalition is a group of parents who get together monthly to share their struggles and successes and learn how to support each

Keeping People Healthy, continued



"I found Linda's class to be beneficial in several ways. She provides real-life examples to illustrate solutions in dealing with parenting challenges. Insightful shopping tips, nutrition facts and recipes rounded out the class experience. I looked forward to this class each week to see what topics would be presented, and think it's a helpful tool for parents with children of all ages in any scenarios they may be facing." - St. Joseph **County Juvenile Court Participant**

other to provide a Great Start for their children from birth to age five. The Eat Healthy – Be Active Community Workshops included lessons on how to Enjoy Healthy Food That Tastes Great, Quick- Healthy Meals and Snacks, Eating Healthy on a Budget, Tips for Losing Weight and Keeping It Off, Making Healthy Eating Part of Your Total Lifestyle and Physical Activity Is Key to Living Well. Participants increased their fruit and vegetable intake, practiced portion control and engaged in more physical activities for their entire family.

"Parents and children enjoy the different activities and nutrition education that has been provided by MSU Extension for many years. They especially enjoy the budgeting tips cutting their food dollars and learning healthier ways to cook for their family." —Matie James, GSPC Coordinator



Continued Success with St. Joseph County Juvenile Court Division

Bundling nutrition education with parent education has been a continued success that was provided by Linda Kline (St. Joseph County), Suzanne Pish (Branch County) and the St. Joseph County Prevention of Child Abuse and Neglect Council (Linda Kline).

Consisting of eight weeks, parents of teens who are involved with the Juvenile Court system have received nutrition education (Eat Healthy—Be Active) and anger management skills (R.E.L.A.X.) offered by MSU Extension. Through presentations, skill-building activities, and group discussions, parents learn effective ways to enhance parenting skills. Many topics and techniques are presented covering praise and selfesteem issues, personality conflicts and resolutions, asset building, helping their children deal with their feelings, and learning ways to enhance communicate with their at-risk youth effectively.

"When parents are ordered to attend Building Healthy Adolescence Group they are often very resistant or pessimistic about the group being helpful and worth their time. After attending Building Healthy Adolescent Group most parents have shared that the group has given them tools and resources to better address concerning issues with their teenager which in turn has benefited the whole family and home environment. Ms. Linda Kline does a great job at working with the parents to help them feel heard and empowered to make positive changes in themselves and within their families. Building Healthy Adolescence Group has been an important component in bringing restorative justice in St. Joseph County Juvenile Probation." — Aubrie Wooden, Probation Officer

Keeping People Healthy, continued



The Show Me Nutrition Curriculum is a sixweek program that was presented to 247 youth. Programming took place in grades K-8th along with preschools in county school districts.

Show Me Nutrition for Youth

The Show Me Nutrition Curriculum is a six-week program that was presented to 247 youth. Programming took place in grades K-8th along with preschools in county school districts. New efforts this year was with the Three Rivers Great Start Readiness Program located at Barrows. The GSRP is a Michigan state-funded preschool program for children with factors that may place them at risk of educational failure. Funding is allocated to intermediate school districts for local programming. Their research of these programs indicated that when provided with high-quality preschool experiences, children showed significant positive developmental differences when they were compared to children from similar backgrounds who did not attend high-quality preschools.

"Last year we had 64 children in our program at Three Rivers GSRP. The students were impacted by Ms. Kline coming in sharing her passion for nutrition. For days after she brought in the wheat stalk the students were talking about the different parts of the plant. The students used the knowledge they gained and used it to play in our Dramatic Play Area. The students became bakers like the Little Red Hen, a story that she read to them. The students were able to take a My Plate home with them after the completion of the program. Several of the students mentioned how they ate dinner on it. As the students were eating lunch they were able to name the components on their plates." — Melissa Hall, Teacher

"Our milk is dairy!"— a recent graduate of the Three Rivers GSRP, now a kindergartener in the Three Rivers district.

Cooking Demonstration is a Fair Tradition

This was the 3rd year for Carol Ann Gulliver (State Fair Homemaker of the Year 1992 and the 1991 County Fair Homemaker of the Year) and Linda Kline presented a cooking demonstration in the community tent. Using a theme, they offer cooking techniques, recipes, proper food safety practices, nutrition education, preparing local produce, and ways to decorate tables for family gatherings. With humor, they encouraged audience

participation and have discovered that people of all ages enjoy learning new ideas to keep their family meal time more memorable.

"It always surprises me how many people approach me in public to tell me they enjoyed our program and how much they got out of it." - Carol Ann Gulliver



Supporting Food and Agriculture



MSU Extension has developed a workshop specifically designed for people who work with agricultural producers and farm families who want to know more about managing farmrelated stress and learn ways to approach and communicate with those in need.

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.

Responding to Stress in Farming Communities

The National Institute for Occupational Safety and Health recently examined 130 occupations and found laborers and farm owners had the highest rate of death due to stress-related conditions like heart and artery disease, hypertension, ulcers and nervous disorders. In 2016, the CDC reports that out of every 100,000 farmers, 90 commit suicide. That is six times higher than the National rate of suicide with non-farmers. Michigan has seen an increase in suicides and suicide attempts over the last year since the commodity prices have fallen dramatically.

Phase one: Mental Health First Aid training is a full-day, hands-on, certification course that can help those people working with farmers and farm families to recognize the signs and symptoms of mental illness and emotional crisis. Two classes were offered during 2016 and 35 MSU Extension and Industry professionals are now certified in Mental Health First Aid.

Phase two: MSU Extension has developed a workshop specifically designed for people who work with agricultural producers and farm families who want to know more about managing farm-related stress and learn ways to approach and communicate with those in need. Educators discuss the present agricultural market situation with an overview of how this affects a farm's financial situation and cash flow, communication techniques, highlighting impact of stress on our body and state of mind, providing information on how to recognize some warning signs of depression, self harm and mental illness.

Since October 2016, workshops have been offered throughout the state of Michigan and Indiana . As a result of the program:

• 72% of participants increased their understanding of the current agriculture financial situation; 27% of participants were already very informed on the issues facing Michigan agriculture.



MSUE Field Crop Program Impacts

- 87% of the participants completing an evaluation indicated learning new information that they intended to utilize on their farm operations in the coming year at these programs.

- Over the last 3 years, more than 85% of the corn growers in attendance at MSUE meetings in S.W. MI reported splitting their nitrogen applications, applying N to corn when the crop uptake was greatest, reducing risk for N losses to surface and groundwater resources.

- 87% increased their understanding of the impact that stress has on their own bodies.
- 91% were now able to recognize warning signs of depression, suicide, and mental illness.
- 95% learned where to send people for help in the community, and of those, over 50% said their awareness of community resources greatly increased.
- 95% of participants will use MSU Extension resources and training in the future.
- 94% of participants were already familiar with MSU Extension prior to this workshop; 68% had previously participated in an MSU Extension workshop on a different topic.
- 89% of participants left the workshop more aware of MSU Extension resources and opportunities.

Workshops in 2017 reached 6 St. Joseph residents in face to face meetings

MSUE Field Crops programs

Michigan State University Extension educators are reaching more farmers by providing an annual Field Crops Webinar Series. Five years ago, Michigan State University Extension educators decided to change the way they conduct winter field crop programs by using a webinar format in addition to traditional in-person meetings. The annual Field Crops Webinar Series reaches underserved audiences who may have trouble attending regular programs due to scheduling conflicts, geography or ability. It gives participants the flexibility to join live sessions or access recorded versions online.

Through the webinars, experts share research results and key points pertinent to crop production for the upcoming year. Topics have included western bean cutworm, resistant and troublesome weed control, soybean sudden death syndrome and wheat stripe rust management, wheat inputs selection, soil fertility for field crops and forage, as well as cover crops for potato and soybean systems.

During 2017, 214 individuals from 50 Michigan counties, five other Midwest states, and Ontario participated in the program. As a result of the webinars:

- \$680,057 was projected in savings or added revenue to farms based on growers who indicated that they intend to implement 174 practice changes.
- Participants earned 603 Michigan Department of Agriculture and Rural Development pesticide applicator recertification credits.

Local Field Crops Educator programs & outreach

• Conducted a collaborative on-farm research project involving a MSU Specialist and Field Crops Educators to investigate the impacts of tillage (residue management) and rotation, among other variables, on soybean production and soil health parameters. Eric worked with 12 farmers (1 in Branch, 1 in Calhoun, 1 in Cass, 9 in St. Joseph Counties) on 23 individual fields to measure variables such as plant growth, weed control, and soil fertility at planting, mid-season and harvest. A grant



A field day was held in the county to highlight the results of the study as well as showcase presentations by two other MSU Extension Specialists and three Educators on other topics important to row crops.

Annual Ag Action Event provides a full day of educational sessions focusing on agriculture, food safety and home gardening topics, featuring a trade show highlighting products and services provided by local businesses. In 2017, 32 of 150 attendees were from St Joseph county.

is being proposed to continue this research for three more years. MSU Extension articles, a bulletin, and a field day were produced that helped farmers identify best management practices for soybean production under different tillage and rotation systems and soil types.

- Completed collaboration with several Extension educators and Crop Specialists to conduct on-farm research on corn stover harvest at four locations in MI (Berrien, Calhoun, Ionia and Lapeer Counties) for stover yield and impacts on subsequent crop yields. Research resulted in several MSU Extension articles and a bulletin (E-3354, Michigan Corn Stover Project: Cattle, Storage and Bioenergy) that will help farmers in deciding whether harvesting corn stover for cattle feed or other uses is economically feasible, and what the impacts may be on yield in subsequent crops in the rotation.
- Conducted on-farm research in collaboration with MSU Extension Crop Fertility Specialist Kurt Steinke to re-evaluate phosphorus recommendations for corn based on soil test results. Trials were located on two farms in Branch County as well as others across the state. Results will help to update the Tri-State Fertilizer Recommendations for corn used by MSU, Purdue, and Ohio State.
- Conducted on-farm research in collaboration with MSU Extension Crop Fertility Specialist Kurt Steinke to re-evaluate phosphorus recommendations for corn based on soil test results. Trials were located on two farms in Branch County as well as others across the state. Results will help to update the Tri-Stat The demonstration was funded by a grant from the Michigan Soybean Promotion Committee and was conducted in collaboration with MSU Extension Field Crops Weed Specialist Christy Sprague and MSU Extension Educator Bruce MacKellar. A field day was held to highlight the results of the study as well as showcase presentations by two other MSU Extension Specialists and three Educators on other topics important to row crops. Attendees included those from: 2 Barry, 1 Berrien, 3 Branch , 2 Calhoun, 1 Clinton, 1 Hillsdale, 8 Kalamazoo, 2 Saginaw, and 9 St. Joseph counties.
- Developed a cropping season kickoff meeting in St. Joseph County where field crops specialists and educators presented talks on a number of topics important to row crop agriculture. Attendees included those from: 1 Berrien , 1 Branch, 3 Cass, 8 Kalamazoo, 17 St. Joseph, 1 Van Buren, 1 Hillsdale, 8 Kalamazoo , 2 Saginaw, 9 St. Joseph Counties.
- Created periodic email updates (weekly during the cropping season, then semiweekly or monthly) to a growing list of local farmers and agribusinesses (over 300 currently) highlighting upcoming MSU programming and other timely information important for crop producers
- Coordinated volunteer efforts with the Ag-Citing program with local 3rd graders at the SJC Fair, where over 400 students from 10 schools in the county participated.
- Participated in the North Central Agriculture and Natural Resources Cropping



In 2107, 2974 Extension Master Gardeners from 76 counties completed the minimum annual re-certification requirements of 15 volunteer hours educating others in their community and engaging in 5 continuing education hours in horticulture.

St. Joseph County has 45 of these Master Gardeners loose in the county helping beautify and educate the community in horticulture.



Systems Academy, a series of workshops for Extension Educators throughout the Upper Midwest. Worked within a group focusing on developing programming on agricultural technology including use of drones in agriculture.

- Represented MSU, and agriculture in general, at career fairs at Sturgis High School and Glen Oaks Community College.
- Wrote or co-wrote over 17 articles on various topics important to row crops for publication in the MSU Extension Field Crops Digest. A few of these articles were also re-published by local newspapers and highlighted in a radio segment.
- Coordinated efforts to hold a focus group of farmers and agribusiness professionals to inform work plans for the MSU Extension Field Crops Team.

MSUE assists Farmers with Business Financials

Telfarm is a Michigan State University Extension accounting software that is specifically designed for farms. It makes it possible for farm managers to closely monitor the financial progress of their operations. MSU Extension educators use this system to teach producers and others good financial management concepts.

• Telfarm services provided by MSUE to 13 St. Joseph County farms in 2017.

Solving lawn and garden challenges with consumer horticulture hotline

Responders on the Michigan State University Extension Lawn and Garden Hotline assist Michigan residents throughout the state, regardless of the location of the caller or expert. They provide reliable, research-based information to help Michigan residents solve lawn and gardening challenges. In 2016, the hotline received calls from all 83 counties in Michigan. When callers ask about fertilizer use, insect control and plant disease prevention, responders provide environmentally friendly advice that helps them maintain healthy soils, solve landscaping issues, and grow fruits and vegetables in their home landscape. Consumers who contact the hotlines are directed to a variety of lawn and garden tools and services available through MSU Extension. These services encompass soil testing, MSU Diagnostic Services, the Gardening in Michigan website, Ask an Expert and Smart Gardening tip sheets and articles.

- From 2012 to 2017, calls have increased 14%. There were 8177 total contacts in 2017. up 4.5% from 2016.
- 29 Calls to the hotline were registered from residents in St Joseph County.

Finishing steers in a feedlot operation can be fed a ration with up to 20% corn stover on a dry matter basis without significantly effecting performance. See Dr. Eric Anderson's article The Michigan Corn Stover Project—Part 3: Cattle feeding study.



"I enjoy interacting with parents and students. I'm now seeing parents that I greeted many years ago and they still call me the "cow lady"! -Betty Meyer

"I appreciate the opportunity to share my passion for agriculture along with the other volunteers in the county. We all realize how important it is for people to be educated about where their food comes from." - Julie Baratta, Ag-Citing Presenter

Promoting Local Agriculture at the St. Joseph County Grange Fair

The "Ag-Citing Experience" has been a program through Extension for 27 years. It takes many volunteers and organizations to bring this program to fruition and to make it a success. Extension collaborated with the St. Joseph County Grange Fair, Farm Bureau, Nottawa Fruit Farm, Burnips Equipment, GreenMark Equipment and the St. Joe Valley Old Engine Tractor Association to provide resources for this yearly event.

Using presenters, tour guides, "nurse Betty", and tractor drivers, this program has become a tradition with many people in St. Joseph County and beyond. One presenter from Kentucky kept their family tradition by continuing to present swine education honoring her aunt who we sadly lost this past year. Two tour guides that were a "sister team", one from California and one from Bronson, assisted their mother this year– yes, it's becoming a "generational thing".



A "Generational Thing"!

Over 400 third graders and over 100 adults weathered rain and extremely high temperatures all week. Not only did

the White Pigeon 3rd grade classes attend, the entire elementary school participated by taking part in a fair visit this year. It was Linda Kline's 23nd year teaching the youth of our county about crops grown here and where their food actually comes from that they place on their plates. "It never gets old making sure they know that chocolate milk doesn't come from a brown cow, nor does ice cream come from a very, very cold one"!

"I actually know more about horses and poultry than swine, but I didn't want to let my aunt down so I kept the family tradition alive." -- Carie Lantz Ag-Citing Presenter





In 2017 the MSU/ **Purdue Extension Educator Lyndon** Kelley with the support of the St. **Joseph County MSUE** office presented Large Volume Water **Use legal** requirements information to 885 **Michigan producers** as a part of 70 formal educational meetings or small group/farm/ dealer consultations.

Irrigation Update

Improving irrigation water management through better scheduling, improved uniform application, checkbook Irrigation scheduling and controlling run-off was the goal of 56 meetings, educational presentations and farm/dealer visits including one in St. Joseph County that reached 25 local producers.

Large Volume Water Use Registration Initiative

In 2006 Michigan implemented registration and reporting requirements for large volume water users greater than 70 gallons a minute capacity to pump. Almost all irrigation pumping facilities, large dairies and many poultry and swine facilities require this pumping capacity. In 2017 the MSU/Purdue Extension Educator Lyndon Kelley with the support of the St. Joseph County office presented Large Volume Water Use legal requirements information to 885 Michigan producers as a part of 70 formal educational meetings or small group/farm/dealer consultations.

A simple comparison of USDA stats too registrations fines that in many of the required registration were neglected. A current initiative offered by MDEQ allows for amnesty for pre-2008 water with drawls that were unregistered to meet the requirement now. Four statewide meetings and work group sessions were used to train ag agency people to assist producers in filling out forms and meeting the proof requirement for existence prior to 2008. These meetings plus efforts from the local county staff have produced over half of the successful applications that DEQ has reviewed.

Explanation and promotion of Michigan Department of Environmental Quality's Unregistered Large Volume Water Use Registration Initiative and the current registration and reporting requirements education is targeted at area of high volume water use and low compliance. Audience ranged from 2 to 55 producers in the field crops, horticultural and livestock/dairy areas. Formal educational meeting along with farm visits/conciliations where conducted.

MICHIGAN STATE UNIVERSITY Extension

MSU is an affirmative-action, equal-opportunity employer, committed to achieving excellence through a diverse workforce and inclusive culture that encourages all people to reach their full potential. Michigan State University Extension programs and materials are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status or veteran status. Issued in furtherance of MSU Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Jeffrey W. Dwyer, Director, MSU Extension, East Lansing, MI 48824. This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by MSU Extension or bias against those not mentioned. The 4-H Name and Emblem have special protections from Congress, protected by code 18 USC 707.