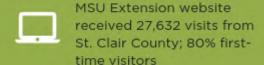


St. Clair County 2018 ANNUAL REPORT

BY THE NUMBERS

Over 100 years of serving St. Clair County



\$59,185 spending with local businesses

6,192 youth in St. Clair
County 4-H programs

347 St. Clair County students enrolled at MSU

MSU disbursed \$6,363,784 in financial aid to St. Clair County students

2,044 MSU alumni in St. Clair County

\$18,471,544 total economic impact in St. Clair County

MESSAGE FROM THE DISTRICT COORDINATOR

Michigan State University (MSU) Extension is the delivery system that brings cutting edge knowledge directly to the citizens of our state. Over the past year, MSU Extension partnered with St. Clair County to continue strengthening youth, families, businesses and communities. Your MSU Extension staff members, grounded in local relationships, serve by bringing the university's research and resources to provide outreach and education in the areas St. Clair County residents need it most.



From agriculture to 4-H to personal finance programs and from youth to senior audiences, MSU Extension provides education to help St. Clair County residents improve their lives. This report highlights just some of the work done last year.

We're passionate about serving St. Clair County and understand that equipping residents with knowledge helps them at home, at work and in their communities. Thank you for supporting MSUE and for partnering with us to make a difference.

Jerry Johnson, District Coordinator

CONTACT





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@MSUExtension



Developing Youth and Communities



MSUE 4-H staff serving St. Clair County:

Lori Warchuck 4-H Coordinator

Liane Allen Program Assistant

Christie Suiter 4-H After School 21st Century Grant

Val Fusee 4-H After School 21st Century Grant 4-H is America's largest youth development organization, providing educational opportunities to over 6 million youth. 4-H programs are available for all youth ages 5-19. We always welcome new members and new volunteers; if you are interested in joining 4-H, please contact the St. Clair County MSU Extension office at 810-989-6935. We would be happy to help you enroll today!

Our volunteers

4-H programs are made possible by the service of our dedicated volunteers. An effective 4-H Council is essential to planning, conducting and evaluating 4-H work. To be successful, 4-H programs must meet the needs and interest of local participants. Determining these needs and interest and then developing and implementing programs that fulfill those needs require the organized involvement of local volunteers and community stakeholders. St Clair Counties 4-H program boasts an active 28 member 4-H Council made up of dedicated volunteers. Vital to the local 4-H program as this active group fulfills their mission thru the following functions.

- Assist in developing a total 4-H program based on the needs of youth and the county and then actively carrying out the plan.
- Introducing new 4-H projects, programs, or activities that are designed to attract new youth to the 4-H program.
- Planning for and assisting with the recruitment, education, and recognition of 4-H members and 4-H volunteers.
- Raising and managing funds to underwrite the planned 4-H curriculum, program, and activities.
- Recommending policy and procedures for the county when not determined by state or national regulations.
- Providing for the representation of the 4-H program at other meetings and events.
- Evaluating the overall 4-H program on a continuing basis.
- Promoting the work of the 4-H Council and the entire 4-H program throughout the county.





Developing Youth and Communities, continued

CAMP Activities included:

- Outdoor skills
- Olympic training,
- Cabin games
- Skits
- Shooting sports
- Nature walk
- Mud hiking
- Kayaking
- Swimming in Lake Huron
- STEM
- Team building events,
- Flag/counselor hunt,
- Olympic Village
- Minute-to-win-it games
- Outdoor cooking

2018 Thumb Area 4-H camp

Sixty-three (63) youth, twenty-two (22) teen counselors and eleven (11) adult chaperones from Huron, St. Clair, Sanilac and Tuscola Counties attended Thumb Area 4-H Camp held at Camp Cavell in Lexington, July 6-8, 2018. The main purpose was to get youth (4-H and non-4-H), ages 9 to 14 years of age, involved in an outdoor-living experience.

Our awesome team of 4-H teen camp counselors and four (4) MSUE staff are responsible for the planning, implementation and evaluation of the Thumb Area 4-H Camp program. Throughout the year, committee members are involved in numerous workshops and trainings in preparation for Thumb Area 4-H Camp.



Thumb Area 4-H Camp offers a golden opportunity to youth to make new friends and share experiences in camping, all while building and developing life skills. Camp featured arts and crafts, singing, outdoor games, campfires and s'mores. "Olympics" was this year's theme for Thumb Area 4-H Camp.

4-H Lake to Table

4-H Lake to Table took place on Saturday, June 23, 2018. Twenty two youth from St. Clair and Macomb Counties participated in a variety of educational hands on sessions.

Youth participating had the opportunity to fish from a boat with all the fishing equipment supplied. Clean their catch and prepare it for cooking. Sampling their fresh catch of the day was definitely a highlight. Other session included a nature hike, fish habitat and outdoor camp cooking. It was a fantastic day.







From left, catching fish, cleaning and preparing fish and grilling is all part of this great Fish to Table event.

Developing Youth and Communities, continued



Presented by Jerry St. James, 4-H Leader, to William Vincent.

4-H Recognizes Excellence in SportsmanshipThe 2018 Karl Kruckenberg Memorial Sportsmanship 4-H Shooting Sports Av

The 2018 Karl Kruckenberg Memorial Sportsmanship 4-H Shooting Sports Award recipient was William Vincent. William has exceeded typical expectations for 4-H members and approaches the ideal standards of 4-H. He has consistently demonstrated a clear sense of purpose and follow-through. As a dedicated 4-H member, William has donated countless hours of his time to the 4-H program. William embodies the drive to become his best self, and his drive inspires other 4-H members to do the same. His active participation in the advancement of other 4-H members' knowledge and skills makes William a valuable part of our 4-H team and a clear choice for the Karl Kruckenberg Memorial Sportsmanship Shooting Sports Award.



Troy Korns

2018 Michigan 4-H Mark of Excellence award winners announced

Every year, counties across Michigan offer 4-H youth ages 11 and 12 the opportunity to participate in Michigan 4-H State Awards' 4-H Mark of Excellence essay contest. As part of the contest, up to two 4-H youth essays from each county are selected to be recognized as award winners.

The essay theme is "Because of 4-H, I can..." and the youth referred to their 4-H experiences as ones that have allowed them to make new friends, try new projects, explore new places and help their dreams come true. Some credited 4-H with helping them increase their public speaking skills, confidence and time management skills. Other 4-H'ers wrote with excitement about their club meetings, events, exhibits and community service projects. Overall, 29 4-H members from 22 counties were honored as 2018 Mark of Excellence county winners.

St. Clair County Winners: Troy Korns and Isabelle Stull

Each recipient received a medal, and their winning essays were added to the Mark of Excellence history book at the Michigan 4-H Foundation and State 4-H Office at MSU Extension. The essays are also on display at the Kettunen Center in Tustin, Michigan.



Isabelle Stull

4-H International Exchange to Japan

Shanna Kowalewski a 17 year old member of the 4-H Green Team in Casco Twp. and a senior at Cardinal Mooney HS in Marine City, participated in the 4-H International Exchange to Japan. She is the only Michigan youth to stay for 8 weeks...the longest length of stay possible. Shanna has studied the Japanese language throughout her high school career and jumped at the opportunity to travel through the exchange program.

Shanna started her St. Clair County 4-H experience as a Kindergarten student enrolled in the Down River 4-H Urban Garden, where she continues as a teen leader. She shows rabbits, photography and excels in leading her club in community service projects.



Shanna Kawalewski



Wolf Research lesson:

- Nutrition and diet need of wolf both in the wild and at the center
- What careers are available at the wolf center
- Where wild packs of wolves live in the U.S.
- Wolf size and weight
- Predator and pray
- Wolf body language
- **Tracks**
- Pack dynamics
- Ravens that clean up wolf meal leftovers

Developing Youth and Communities,

Other 4-H learning opportunities

St. Clair County 4-H provided local members and volunteers opportunities to connect to learning experiences beyond the county as well. These included:

- 4-H Exploration Days-a pre-college awareness program for youth ages 11-19 held on the campus of Michigan State University. Forty three youth and 15 chaperones from St. Clair County spent 3 days on the college campus, 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.
- Wolf Research and Ecology Linking to the International Wolf Center in Minnesota with technology, youth and adults were able to observe the centers wolf residence in their habitat enclosures. Utilizing a combination of the centers experts and our planned hands on activities. Youth were able to map in real time a wolf in the wild with tracking collar that was equipped with a GPS unit.



How scientist gather and utilize data collected related to wolf packs and hunting territory.

Utilizing technology to connect local youth to out of state educational resources will be something we will continue to seek out.

4-H After School 21st Century Grant

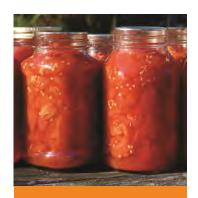
What do you get when you combine 4-H programming with area school programs?

4-H Afterschool Programs foster a unique combination of fun and learning that help youth develop lifelong skills, such as leadership, critical thinking, and teamwork. The programs address a growing need for quality after-school programming in the U.S., where as many as 15 million children come home to empty houses after school. Research shows that high-risk youth can greatly benefit from 4-H programming.

To combat this, 4-H Afterschool Programs, provided by St Clair County MSU Extension offer a wealth of research-based, ready-to-use, "learning by doing" curricula on a wide variety of topics. These programs include academic support, hands-on STEM activities, and much more!

Port Huron area schools that participated in 4-H in afterschool programing. Nearly 400 youth participated in programing with the primary focus being STEM. Elementary schools included Garfield, Kimball, Cleveland, Woodrow Wilson, Roosevelt, Crull, Michigamme, the middle schools included Central and Holland Woods.

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.

Reducing foodborne illness through education

Food Safety is a global issue from farm to table. Its impact on our health and well-being is significant across the life span. Food-borne illness outbreaks occur on an ongoing basis crossing all socioeconomic lines from production, consumption and preservation of foods. Overall health is impacted by the safety of the food supply and foodborne illness.

Food Preservation

As Michigan gardens grow and thoughts turn to those gardens and farm markets overflowing with fresh produce, it is a good idea to think about safely preserving fresh produce. The bounty of Michigan produce can be enjoyed all year long with safe food preservation. Food preservation is a science and we must properly preserve food or dangerous bacteria can be present and cause foodborne illness. Food Preservation classes teach safe preserving techniques and provide valuable resources to ensure the safety of home preserved food. 65 residents participated in classes to learn about preserving food safely.

Cooking for Crowds

Classes were held for 15 volunteers. Cooking for Crowds is designed for non-profit groups that run food fundraisers and events such as meals, bake sales, sub sales and dinners. There are a range of food safety risks that develop when cooking large volumes of food and participants learn to reduce those risks and help prevent the conditions that may lead to a foodborne illness.

Michigan FRESH fact sheets

These educate on the safe use, storage and preservation of Michigan grown fruits and vegetables. These are distributed at Vantage Point Farm Market in Port Huron on every day the market is open and the St Clair County MSU Extension Office providing local access to these great resources for County residents. http://www.canr.msu.edu/mifresh/







Ensuring Strong Communities

MSU Extension
understands that
building civic
engagement and
healthy economic
structures leads to
greater opportunities
and stronger
communities.

Serving the State of Michigan

Andy Northrop

Extension Educator northro5@msu.edu Office: 810.989.6935 200 Grand River #102 Port Huron MI 48060

- · Sustainable Tourism Development
- · First Impressions: Tourism Assessments
- · Planning for Tourism
- · Community Vitality
- · Leadership and Facilitation

Four Michigan Thumb communities organize and take action after receiving results from tourists' first-impressions

Michigan State University Extension tourism educator conducts follow-up evaluations to determine what actions and impacts come from First Impressions Tourism (FIT) assessments.

Educators partnered with Prosperity Region 6- a seven county partnership comprised of Huron, Tuscola, Sanilac, St. Clair, Lapeer, Genesee, and Shiawassee counties- to offer First Impressions: Tourism Assessments (FIT) to four separate communities during 2017. The communities were selected after



reviewing their applications to participate in FIT during 2017 and included the Village of Elkton and the Village of Sebewaing (Huron County), Imlay City (Lapeer County), and the City of Marlette (Sanilac County). The partnership led to each community being awarded \$2,000 from Prosperity Region 6 to implement improvements of their choice based on the results from FIT.

All four communities completed the FIT program successfully by adhering to the program expectations and their roles and responsibilities outlined in advance. Accomplishments include: establishing a cohesive and committed Community Leadership Team (CLT), attending the required Zoom kick-off meeting with MSU Extension FIT tourism leaders, organizing and sponsoring a community report forum (CRF) open to all where results are shared in a location identified by the community, and being available for follow-up evaluation meetings six to nine months after program completion. In addition, Prosperity Region 6 had expectations that implementation dollars would be spent before July 2018, which all four communities have executed. As of mid-2018, FIT has proven to be an effective program for communities interested in improving tourism, place making and overall quality of life.

Each community identified either one large or several small projects to move forward with. A brief list of impacts as a result of FIT for each community is below:

<u>Elkton</u> – Promotional social media videos, mural paintings in downtown designed to attract visitors, as well as student-to-business/entrepreneurial relationships established.

<u>Imlay City</u> – Historical walking tour and website consolidations, as well as beautification programs for community members and private/public partnerships between the city and Vlassic.

Ensuring Strong Communities, continued





Serving the State of Michigan

Joseph Bixler
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200 Grand River #102
Port Huron MI 48060

- Fiscal Sustainability for Michigan Municipalities – Statewide
- New County
 Commissioner
 Training Statewide
- Non-Profit
 Community Grocery
 Store Model –
 St. Clair County
- Plant Science Laboratory- Yale Public Schools

<u>Marlette</u> – Development and implementation of their first farmer's market being drive by a re-engaged Downtown Development Authority comprised of nine new members.

<u>Sebewaing</u> – Successful completion of MSU Urban and Regional Planning program resulting in a new recreation plan and updates to master plans as a result of FIT, as well as the launching of a new farmer's market. Sebewaing has also developed their first Historical River District too as a result of participating in FIT.

FIT2017 communities continue to work diligently towards meeting goals identified during the FIT program. A majority of communities have used the \$2,000 implementation money to receive additional grant dollars for funding more projects. This successful model has influenced Prosperity Region 1 in adopting a similar funding model across the Western U.P. As a result of these four FIT programs in 2017, the program has received statewide attention from Michigan Economic Development Corporation and individual Michigan communities interested in funding their own FIT community assessment

This successful community partnership endeavor has to lead to another round of FIT programs across Prosperity Region 6. Marine City in St. Clair County and Cass City in Tuscola County were both selected for FIT2018 in District 10. Both communities have begun the FIT process as of mid-August and will work directly with Andy Northrop, Tourism and Community Vitality Educator, throughout 2018 and 2019.

Food Policy Council in Michigan's Thumb Area

The five District 10 counties including St. Clair, Lapeer, Tuscola, Sanilac, and Huron counties will be represented by a food policy council beginning the fall of 2018. The purpose of the council initially will be to develop a thorough understanding of what the food system looks like in the greater Thumb area both from a consumer and producer perspective. The food system is a large dynamic web of networks represented by both private and public sector circles. It further represents a large portion of economic activity within the district geographic area and internationally.

Additionally, the council will evaluate what best strategies will assist in the promotion of a food system that provides for the food needs of those who are secure and insecure. To this end, the council will develop and sponsor projects, programs and other initiatives that provide education to the greater public and promote changes in practices with stakeholders and policies with elected officials that undergird the larger food system.

The council received a \$3,000.00 grant from the Michigan Local Food Policy Council Network in June of 2018. Each county will have designated representatives to serve on the council beginning in September 2018. If you or someone you know would like to be involved in this council please contact Extension Educator Joe Bixler at bixlerj@anr.msu.edu or call 810-989-6309.

Keeping People Healthy



Carol Bublitz, Nutrition Program Instructor at the Community Resource Fair

*One student said that the nutrition class was her favorite thing she did in the afterschool program, and that because of that hands-on cooking experience, she plans to have a career in the culinary arts.

**A kindergarten student said, "I never tried that before, and I like it." The student even pointed out the Nutrition Facts Label to a parent at home.

MyPlate in St. Clair County

"SNAP-Ed is an evidence-based program that helps people lead healthier lives. SNAP-Ed teaches people using or eligible for SNAP (Supplemental Nutrition Assistance Program) about good nutrition and how to make their food dollars stretch further. SNAP-Ed participants also learn to be physically active." USDA's Choose MyPlate and the Dietary Guidelines for Americans are the basis for the nutrition education curricula that SNAP-Ed uses. Among adult participants in SNAP-Ed programs, 80% showed improvement in one or more nutrition practice (makes healthy food choices, reads nutrition labels, etc.) and 72% showed improvement in one or more food resource management practices (planning meals, does not run out of food, compares prices, etc.). Among youth, over 95% showed improvement in one or more core nutrition areas.

"SNAP-Ed works by building partnerships with all types of community organizations. Communities have social marketing campaigns, hold nutrition education classes, and improve their policies, systems, and the environment of the community. SNAP-Ed even addresses local issues like lead poisoning." ¹ Throughout St. Clair County, MSU Extension Nutrition Program Instructors Carol Bublitz and Jennifer McNamara partnered with many organizations to deliver nutrition and physical activity programs.

From the Great Start Readiness Program (GSRP) and other preschools to elementary and high schools in Algonac to GSRPs in Marine City, Marysville, Kimball, and Port Huron to elementary schools and high schools in the Port Huron Area School District* and East Shore Leadership Academy**, to summer school in Capac, to special events such as Earth Fair and the 4-H & Youth Fair at Goodells County Park, youth nutrition programs spanned the county. Partners throughout the county also supported adult nutrition programs at Clay Township Hall, Algonac High School, senior centers in Marine City and Port Huron, Marysville Library, St. Clair County Community Mental Health, and the St. Clair Community College. At special events such as the St. Clair County Community

Baby Shower, Community Resource Fair, Show Me the Money Day, the Breastfeeding Stroll, National Night Out, the Council on Aging Foster Grandparent's Camp S.H.I.N.E. Zone, and Healthy Kids Day at the YMCA of the Blue Water Area, SNAP-Ed brought fun, interactive education on nutrition and physical activity.



Red, White, and Blue spuds at the 4-H & Youth Fair with a picture of potato harvest.

Keeping People Healthy, continued

Encouraging 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.



"MyPlate" is one of the fun ways MSUE SNAP-ED introduces fruits and vegetables to school age children. Most children can't resist tasting while learning about food groups.



SNAP-Ed partnered with 4-H to offer unique programs. Together Carol Bublitz and Lori Warchuck planned to "Bring the Farm to Town" at the Port Huron Housing Commission Gratiot, Huron, and Dulhut Villages. Youth were able to learn where pizza ingredients come from and to plant a pizza garden; to learn about bees, pollination, and honey and taste smoothies and cookies made with honey; and to learn how milk ends up at the store and to make ice cream with dry ice (Smokin') Ice Cream.

At the 4-H & Youth Fair, youth learned to "Eat Your Ag". These from-dirt-to-dinner programs featured not only learning about food sources and production, but also had hands-on experience making mini-pizzas, spiral cut "potato tornadoes", and corn tortilla chips to eat with salsa. While the food was cooking youth were able to participate in a physical activity trail and other fun 4-H learning. The week culminated with the Spartan Spectacular, in which staff from various MSU Extension programs engaged youth in activities. Nutrition and Physical Activity Staff provided Breakfast from the Farm Superheroes and Rock the Bike (a blender powered by riding a bike). The 4-H staff provided the ever-popular Smokin" Ice Cream, plus a craft to make a bank to teach youth how to invest in their future, face-painting, bubble science, Fair Trade trading cards, and the physical activity trail. Youth also learned meat science, such as how to cook ground meat safely and how to use a food thermometer.

 $1\ https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program-education-snap-ed$

District 10 Nutrition Staff at The Thumb Octagon Barn Agricultural Museum event

The Thumb Octagon Barn Agricultural Museum, located in Tuscola County, is an agricultural museum and educational center open to individuals, families and student groups to educate and stimulate awareness of our agricultural heritage.* May 9-11 the Barn offered school field trips with students coming from Huron, Tuscola, Sanilac, Bay, Saginaw, St. Clair, Lapeer, and Genesee Counties. The barn reports that 1,426 students attended and visited the 26 Education Stations offered to students.

MSU Extension reached 1,403 people (students and chaperones) over the course of the 3

days. The theme was
"The Thumb:
Naturally Sweet", so
our display was
"Fruit: Nature's
Candy" and our
education discussed
recommended
servings, forms of fruit,
and included a fruitthemed physical
activity game.



Keeping People Healthy, continued

MSU Extension provides trusted. evidenced-based education and expertise in:

- Markets and **Financials**
- Risk Management Plans and Farm **Analysis Information**
- Managing Stress, Anger or Depression

District 10 Educator

Kristina L. Swartzendruber **Extension Educator**

Improving Health & **Nutrition Institute**

Huron, Lapeer, St. Clair, Sanilac and **Tuscola Counties**

989/672-3870 office 989/245-5903 cell

Farm stress program

In collaboration with the Ag and Ari-Business Extension Educators in Districts 9 and 10, Kris Swartzendruber, Extension Educator for Social and Emotional Health, conducted the following Farm Stress: How to Cultivate a Productive Mindset programs for area farmers:

Thumb Ag Review Meetings: 72 adult participants

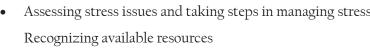
Farmers know how to care of their animals and crops, taking careful steps to ensure that they are healthy and safe. Unfortunately, farmers don't always take the same care in monitoring and managing their own mental and physical stress and fatigue. At present, commodity prices are low, making stress especially palpable for the farmers in the thumb area.

MSU Extension puts a high emphasis on making sure farmers care for their own health and wellness in this high-stress profession. Whether these stresses come from a financial

issue or the stresses of everyday life, the Farm Stress program is designed to provide information and resources to not only help the farmers identify and manage stress for themselves, but also for their family members, friends and/or neighbors.

As a result of these programs, the majority of the participants reported a significant increase in their knowledge about:

- Understanding rural stress issues and the warning signs of stress
- The impact stress has on our **hodies**
- Assessing stress issues and taking steps in managing stress



Other programs offered:

Kris Swartzendruber, Extension Educator for District #10, offers programs that focus on:

Social Emotional Health: programs that help participants learn anger management, problem-solving and communication skills, as well as mindfulness techniques that help reduce stress.

Disease Prevention and Management: prevention and management programs that provide participants with strategies to improve the quality of their diets, manage chronic health conditions and reduce their risk of type 2 diabetes.



Making the Most of Our Natural Assets

Partners involved in program development and delivery:

- DNR Fisheries Division
- USGS Great Lakes Science Center
- DNR Lake Huron Citizen Fisheries Advisory Comm.
- Michigan Charter Boat Assn.
- Michigan Steelhead and Salmon Fisherman's Assn.
- Blue Water Sportfishing Assn.
- Thumb Chapter MSSFA
- Lake Huron Sportfishing Club
- Thunder Bay Walleye Club
- Saginaw Bay Walleye Club
- Purdue University
- MDEQ Office of Great Lakes
- US Fish & Wildlife Service
- USDA Wildlife Services
- NOAA Thunder Bay National Marine Sanctuary
- Les Cheneaux
 Sportsman's Club

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.

2017 Lake Huron Fisheries Workshops

Workshops were held in Port Huron, Bay City, Oscoda and Cedarville. Scientists and fisheries managers shared research and management updates, with time for participants to ask questions, trade insights and share input on a variety of fisheries management topics and issues. Workshops included information and status updates on topics such as fish populations and angler catch data, forage or prey fish surveys, offshore fisheries from native lake trout recovery, and successes with Atlantic salmon program. The status of Saginaw Bay yellow perch and walleye, updates on fisheries management activities, citizen science opportunities for anglers, and other Lake Huron related topics of local interest were discussed.

These workshops offered a great opportunity to learn directly from and visit with a variety of fisheries experts who study and manage this important fishery. MSUE Sea Grant educators involved in developing the workshop series included Brandon Schroeder, Katy Hintzen, Ron Kinnunen and Elliot Nelson.



Supporting Food and Agriculture



According to US
Dept. of Commerce
the value of crops,
livestock and other
income for 2016
raised in St. Clair
County was
\$80,471,000

MSU Extension Agriculture educators serving St. Clair:

Marianne Buza—dairy

Phil Kaatz—forages and field crops

Michael Metzger—small ruminant

Martin Nagelkirk—wheat

Jeannine Schweihofer— Animal quality assurance & food safety

Kable Thurlow—beef

Bob Tritten—fruit

Thumb Ag Review provides results of research on local field crops

The Thumb Ag Reviews are a series of post-harvest meetings intended to provide farmers, agronomists and agribusiness an opportunity to learn about the results from the research and demonstration field trials conducted by the MSUE Field Crops educators located in the Thumb of Michigan.

Phil Kaatz, Bob Battel, and Martin Nagelkirk were the MSU Extension educators who presented the findings at five locations in the Thumb. These locations included Saginaw Valley Research & Education Center in Richville, Thumb Ag Day in Ubly, Lapeer Education & Technology Center in Attica, Westpark Inn in Sandusky, and at Gracies Restaurant in New Lothrop.

The topics discussed included:

- corn hybrid trials
- soybean variety trials
- glyphosate resistant varieties
- conventional non-herbicide resistant varieties
- RR 2 Xtend varieties
- Liberty Link varieties
- biological additive trials
- corn population trials
- yard compost in a corn/soybean rotation
- corn nitrogen rate trial
- soybean cyst nematode resistance variety trial
- alfalfa sulfur source trial
- wheat fungicide efficacy trial on stripe rust susceptible varieties

Intensive management of wheat inputs

In all, there were 160 participants, 77% of the participants completed a post-evaluation survey. Those completing the evaluation represented 107,420 acres of crops. 83% said they would make changes in management practices based on the information they received, and estimated a potential in increased revenue or in cost savings of \$242,885 from implementing the changes.

MSU Extension provides trusted, scientific-based education and expertise in:

- Food Safety
- HACCP Plans
- Product Quality
- Beef Quality Assurance
- Meat Cutter Training Course
- Chronic Wasting
 Disease resources for meat processors
- USDA Grant of Inspection

Dr. Jeannine Schweihofer grobbelj@msu.edu Office: 810.989.6935 Cell: 989.996.0684 200 Grand River Ave. #102 Port Huron MI 48060

Serving the State of Michigan

Food Safety Courses Hosted in St. Clair County

Many food processors are required to have food safety plans, including Hazard Analysis and Critical Control Points (HACCP) or Preventive Controls for Human Foods. These important industry trainings that provide participants with a certificate at the end of the course were hosted by MSU Extension in St. Clair County and co-taught by Dr. Jeannine Schweihofer and team of Campus specialists including Dr. Les Bourquin, Dr. John Partridge and Mr. Jason Hofman. The HACCP course was held February 27-28, 2017 and had 12 participants. The Preventive Controls for Human Foods course was held June 7-9, 2017 and had 18 participants. Dr. Jeannine Schweihofer coordinates the MSU HACCP team.

Beef Feedlot Education

Thumb Cattlemen Series—The Thumb Cattlemen series starts in December and ends in April. The group meets once a month to learn from experts and discuss with each other topics that include animals well-being, animal health, fundamentals and opportunities in Michigan feedlots, Packers and Stockyards Act, environmental management, managing farm stress and meat quality. Farmers from St. Clair County attend these workshops. The series is coordinated by Dr. Jeannine Schweihofer.

Great Lakes Professional Cattle Feeding and Marketing Shortcourse – Feedlot producers from St. Clair and surroundings counties attend this annual shortcourse. Topics include educational information and research results regarding management and marketing.



Cooked Color of Ground Beef



Consumer Education Related to Meat Safety at St. Clair County 4-H and Youth Fair

Consumer education related to meat cookery methods and safety was demonstrated at the St. Clair County 4-H and youth fair. Participants were able to see the importance of using a food thermometer when cooking ground beef patties and that internal color is not a valid indicator of doneness. Patties that looked pink inside were actually safe to consume and patties that looked well done were not cooked to a safe internal temperature.

Meat Processor Assistance

One business in St. Clair County was able to expand their product offerings to include bacon under U.S. Department of Agriculture inspection. This included developing a Hazard Analysis and Critical Control Points (HACCP) plan with the establishment. The additional HACCP plan allows this business to sell bacon wholesale as well as offer this product to farmers who choose to sell individual packages of meat at places such as farmers markets or on-farm. In the two months following implementation of the bacon plan, the business already has a customer purchasing 100 pounds per week for a local restaurant. In addition to HACCP assistance provided to the establishment above, additional food safety issues were addressed related to product and process quality and safety. Dr. Jeannine Schweihofer assisted the establishment.

Explore Your Future – February 10, 2018

A total of 80 youth and adults attended (despite a severe winter storm event occurring) and were exposed to careers related to Agriculture and Natural Resources including animal science, community food systems, crop science, entomology, food safety, forestry, health and nutrition, ichthyology, meat processing, and veterinary science. There were 4-H adult and youth volunteers that assisted with several of the ANR career stations. There was also programming on career readiness and preparation. St. Clair County Community College partnered with MSU Extension on this event. St. Clair County Community College hosted the event and provided education on careers related to computer information systems, criminal justice, marketing and sales, medical technology (obstetrics, med surgery, medical assistant, and radiologic technology), nursing, paramedic, robotics, and welding.

Each career area represented had a hands-on interactive demonstration that engaged youth and adults in exploring careers available. Salary information and career opportunities in each area were also presented.





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,

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 map)

One Enviroweather station is located in Emmett, with more located throughout or near the Thumb. 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.

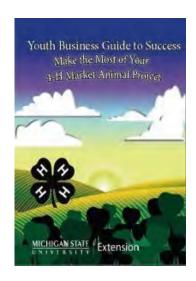
Enviroweather is a collaborative project of: Michigan Climatological Resources Program & the MSU Integrated Pest Management Program. It is supported by: Project GREEEN, MSU AgBio Research, MSU Extension, private donors, and the MSU departments of

Crop and Soil
Sciences, Entomology,
Forestry, Geography,
Horticulture, and
Plant Pathology.







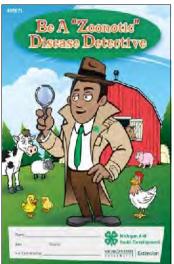


Betty Jo Krosnicki, Extension Educator from Sanilac County, is one of the authors of the "Youth Business Guide to Success" curriculum.



AT MICHIGAN STATE UNIVERSITY





Preparing youth for future careers in agriculture

As a pillar of Michigan's economy, agriculture must continue to grow and thrive. One way to ensure this success is to prepare an informed and skilled workforce ready for careers in this essential sector.

To meet this need, MSU Extension offers youth a continuum of learning opportunities in the agriculture industry. These opportunities range from interactive experiences such as 4-H Renewable Energy Camp and World Food Prize Michigan Youth Institute, to educational resources such as the Youth Business Guide to Success animal marketing curriculum and zoonotic disease prevention tools.

Through these experiences and resources, as well as county 4-H projects, youth are educated about agriculture and prepared for careers in this important industry. In the last program year in Michigan:

- More than 24,000 4-H youth participated in animal, biological and plant science projects in 78 counties.
- More than 850 youth took part in Michigan 4-H pre-college programs with an
 agricultural focus. These programs, which include 4-H Exploration Days and 4-H
 Animal and Veterinary Science Camp, among others, are designed to help youth
 explore potential careers or academic areas.
- The Michigan 4-H Agriculture Career Fair was held on May 13, 2017 in Frankenmuth.
 Planned jointly with the Lapeer County Farm Bureau, this all-day event was attended by 28 teens and 11 parents, many from Sanilac and the Thumb area. Focus of the career fair was exploring agricultural careers, writing an effective résumé, interview skills, and networking.



On Farm Research Influence Winter Education Programs.

Since the summer of 2016, the MSU Extension dairy team has been doing a summer research project on farms across the state. These research projects are to help answer questions dairy producers have. The research projects provide valuable information to the farms and create picture of the issue state wide. The first project the team conducted involved the immunity of dairy bull calves verse dairy heifer calves. The 2017 winter education program was about how to improve your calf raising program biased on results from the project. The program was held at 6 locations, including Bad Axe.

Summer of 2017 The dairy team's research involved evaluating parlor performance by measure milk let down and milk flow. The topic for the 2018 winter education program was ways to increase profits by making changes to your parlor. Meetings were held in 5 locations. For the 2018 summer project the level of heat stress on dairy farms is being assessed. The 2019 winter education program will be influenced by the results of the project. Of the 3 research projects 21 Thumb area farms have participated.



Parlor inspection tour

Thumb Dairy Odyssey

Thumb Dairy Odyssey Days just completed its 7th event. The first event took place in the summer of 2016. This continues to be a unique event that is pulling youth from all over the state to learn about dairy. This program was invented by 4-H member, Addy Battel. It was created because, even though the Thumb area of Michigan is the number one milk producing area in Michigan, it lacks any youth events for dairy. This event takes place on Saturdays in the summer. In 2017 and 2018 each summer had 2 separate Saturday events where youth were able to go to different local dairy farms and learn about animal science, agriculture and most importantly some of the career possibilities they present. Many farms across the state of Michigan struggle to find those who want to work on farms or work in agribusiness.

These youth were also encouraged to try showing animals at fair or attending events like dairy days at MSU. In 2017 and 2018, Thumb Dairy Odyssey Days had 87 youth participated and there were 54 parents and volunteers that attended.



Hendrick Eggink gives a farm tour



Marianne Buza teaching low stress animal handling



Milan Forrester clips a cow for show with volunteer Jared Sanderson

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