MESSAGE FROM THE ACTING DISTRICT COORDINATOR:

Michigan State University Extension is the community-based arm of Michigan State University (MSU), working in partnership with counties throughout the state. We help people improve their lives by bringing the vast resources of MSU directly to individuals, communities and businesses.

MSU Extension helps grow Michigan’s economy by equipping residents with information needed to do their jobs better, raise healthy and safe families, build communities and empower their children to dream of a successful future.

We provide research- and evidence-based educational programs to meet the needs of our local communities. Our staff have access to MSU AgBioResearch scientists, other MSU researchers, and land-grant university researchers throughout the nation.

This report is a snapshot of work done by MSU Extension staff with Sanilac County residents over the past year. We value our relationship with the leadership in Sanilac County. Working in partnership, we make a positive difference for people across the county. Thank you for your support.

Matt Shane, Acting District Coordinator

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MISSION:

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

MEASURING OUTREACH

CONNECTING WITH RESIDENTS 2016-17

4-H Traditional Program, Youth ................................................................. 1,029
4-H Adult Leaders .................................................................................. 307
4-H Youth Leaders .................................................................................. 48
Participants in Agriculture education programs ..................................... 625
ServSafe education participants ............................................................. 64
Nutrition education participants...(series and one-time) .................... 1,133
Social emotional health education participants .................................. 426

DISTRICT 10 DIGITAL REACH

From July 1, 2016 to June 30, 2017, there were 70,370 visits from District 10 which includes Sanilac County to the www.msue.anr.msu.edu/ website. The MSU Extension website is filled with pages of rich, science-based content. Search engine rankings make www.msue.anr.msu.edu/ one of the most visited Cooperative Extension Systems education sites in the country.

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Sanilac County—An Agricultural Powerhouse

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

The 2012 USDA Census of Agriculture, the most recent report available, stated that the market value of agricultural products sold from Sanilac County was $420,966,000. This means that Sanilac has the 4th highest value of agricultural products in the state. Of this number, $280,054,000 is the value of crops (3rd highest in the state), and $140,912,000 is the value of livestock, poultry and their products (6th highest in the state).

As far as individual crop or livestock categories, Sanilac is number one in Michigan in acres of soybeans (126,392 acres), and number two in the following categories:

- value of grains,
- value of other crops and hay,
- value of cattle and calves,
- acres of corn,
- acres of wheat, and
- number of cattle and calves.

The MSU Extension Field Crops Team provides research-based knowledge to address the needs of field crop producers including strategies for managing production risks and advancement of efficient farming practices that enhance profitability while protecting soil and water resources. Program 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.

MSU Extension Agriculture educators serving Sanilac:

Bob Battel—field crops
Phil Kaatz—feed, forage and grazing
Martin Nagelkirk—wheat
Dennis Stein—business mgmt.
Steve Poindexter—sugar beets
Michael Staton—soybeans
Marianne Buza—dairy
Jeannine Schweihoffer—Animal quality assurance & food safety
Winter wheat receives specialized attention from local Agricultural Educator

Winter wheat is an important crop for Michigan, particularly in the Thumb region. As an Agriculture Extension Educator located in Sanilac County, Martin Nagelkirk focuses his efforts on providing statewide support to the wheat industry to help insure that wheat production remains a profitable crop for Michigan growers.

Martin’s educational efforts for wheat producers include writing and disseminating fact sheets, news articles, and a wheat newsletter, as well as helping to conduct field meetings and winter educational events. His work generates information through extensive field research that addresses the effectiveness of various production inputs and practices.

The success of the wheat initiative is due, in part, to a close working relationship with the Michigan Wheat Program, a grower supported referendum developed to financially support research and outreach that promote the profitable production of wheat in Michigan. Martin’s work is also recognized and financially supported by national programs and industry.

In addition, the success of Martin’s wheat initiatives can be attributed, in part, to the collaboration he receives from Michigan State University Specialists who assist in specific projects; individual farmers who allow research to be conducted in their fields; and to an informal group of statewide growers (called the MI Wheat Workers) who provide information on the crop’s progress throughout the season.

While Martin’s wheat initiative often takes him outside the Thumb area, other specialized Agriculture Extension Educators directly serve Sanilac County farmers. For example, there are Educators focused on soybeans, sugar beets, cover crops, and farm business management that interact with Sanilac County growers on a daily basis.

According to the USDA Census of Agriculture (2012), Sanilac County is second in the state in number of acres of wheat, with 51,908 acres planted.

Aerial drone photo of wheat research trials, Deckerville, MI 2016

Local wheat research adapts conventional equipment for planting, treating and harvesting research plots.
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 in December, 2016. 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, with 43 from Sanilac County. 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.
2016 Pest and Crop Management Update

The 2016 Pest & Crop Management Update seminars were held in early 2016 at six regional locations across Michigan. Locations included Allegan, Alpena, Cass, Gratiot, Saginaw and Sanilac. These seminars were held in response to priorities set by MSU specialists, MSUE educators and their advisory group comprised of farmers and agribusinesses. The top three priorities identified for programming were:

- soil management,
- profitability, and
- reducing production risks.

MSU researchers and Extension educators addressed all of the top priorities at the seminars. They provided farmers and agribusinesses with the latest research results and recommendations for field crop weed, insect and disease control and crop fertilization as producers prepared for the 2016 growing season.

In addition to the work of MSU Extension, Michigan field crop producers are supported by commodity organizations that engage in market development, research and outreach. These strategic partners (Michigan Soybean Promotion Committee, Michigan Corn, and Michigan Wheat) help offset expenses associated with the meetings by providing the MSU Field Crops Weed Guide to each participant in addition to other marketing and promotional resources.

In all, 490 individuals attended one of the seminars, with 77 from Sanilac County. 212,886 acres were represented by the attendees, Almost 85% of the attendees were either farm owners (77%) or farm employees (7%).

Changes that respondents said they would consider making based on the information they heard were in the areas of:

- seed treatment reduction,
- weed control,
- seeding rates,
- fungicide treatments, and
- fertility.

They estimated that they could increase income or realize savings of $444,985 by implementing all of the changes they were planning to make.

Link to 2017 MSU Field Crops Weed Guide
Veterinary Feed Directive—Impact on producers and youth exhibitors

The new Veterinary Feed Directive (VFD) changes that began on Jan. 1, 2017 limit the use of some antibiotics administered in feed and require veterinary oversight to obtain these products. The new rules affect all food production animal producers, including 4-H participants who raise livestock. The FDA is working to ensure the judicious use of antibiotics that can be used in humans. Not all antibiotics will be considered VFD drugs. The drugs affected by the VFD are those that are used for humans and animals. The main focus of the VFD is that some feeds and some medication used in water will now require a prescription from a veterinarian. The use of injectable antibiotics will not be affected.

The MSU Extension Dairy Team held meetings across Michigan in 2016 to help producers prepare for the changes. The meetings provided an opportunity for dairy producers, farm employees and industry professionals to learn about actions needed in order to comply with the directive. The rules apply to medicated feed (requiring a VFD), and medications used in water (requiring a prescription).

Seven educational meetings were conducted Michigan in November, 2016. Host sites were Sandusky, Fremont, Cadillac, Ionia, Ellsworth, Lachine, and Clare. Area veterinarians, feed mill representatives, and drug company representatives were also involved. A panel discussion led by local veterinarians, nutritionists and feed mill managers followed. Attendees learned:

- What is the Veterinary Feed Directive (VFD)
- How the VFD will affect feed-delivered antibiotics commonly used in agriculture
- How a farm can comply with the VFD
- What is a Veterinary-Client-Patient Relationship (VCPR)
- What you need to do to obtain feed-based antibiotics
- Discussion on implementation of VFD with veterinarians and nutritionists

Keeping accurate records is an essential part of animal management and a requirement of the Veterinary Feed Directive (VFD).

Michigan 4-H has teamed up with MDARD to provide resources to youth and adults to assist in understanding these changes. Additional resources can be found at the MDARD Youth webpage.
Thumb Young Dairy Group

Dairy is an important part of the agricultural landscape in Sanilac County. In the 2012 USDA Census of Agriculture, the sales value of milk was almost $97,000,000, making Sanilac the 3rd highest county in Michigan and the 77th highest county in the United States in the value of milk production. To keep this industry strong and growing requires education not only of current dairy producers, but also looking at the generation of young farmers coming up. MSU Extension Educator Marianne Buza did just that in 2016 with her series of meetings for members of the Thumb Young Dairy Group.

Buza held seven educational meetings from January through December, 2016. The target audience was young adult dairy audiences. Farm owners, employees, and industry professionals were all in attendance. All were invited but topics were chosen to best fit the younger generation.

These events were held to educate young dairy professionals on multiple areas of their industry. Many young dairy professionals are isolated because of work load and the rural area. This group allows them to gather and network with their peers. These young dairy professionals also have few avenues to go to for education. This is because of time limitations and finances. These Thumb Young Dairy Group participants have never been charged for this education because of the willingness of local sponsors to help cover cost for food.

A variety of educational topics were covered. Topics where chosen by the surveys the group filled out. They included: farm tours and new technology, injection site reactions and beef quality assurance, genomics, on-farm crisis preparedness, farm tour and starting a new dairy, silage harvest and utilizing your data.

The seven sessions rotated between locations in Snover, Sandusky, Bad Axe, Harbor Beach, and Decker. Attendance ranged from 11 participants at one session, to a high of 44 at another. In all, 148 adults attended, with 55 from Sanilac.
When Michigan State University experts partnered with Michigan Sugar Company—a grower-owned cooperative—to revive Michigan’s declining sugar beet industry, the result was sweet success. Today, Michigan is the nation’s fourth-leading producer of sugar beets, producing one billion pounds of sugar annually. The state is home to four sugar factories—all owned by growers—and supports more than 1,000 farmers located mostly in the Thumb region.

Brought to the United States from Europe, sugar beets have been grown in Michigan for more than 100 years. But yields of Michigan beets began to decline in the 1990s. By the mid-'90s, yields fell to an unprofitable level of production.

“People from the sugar industry approached us to help them study the problem and come up with solutions,” said Steve Poindexter, senior educator with MSU Extension and MSU AgBioResearch. “If production and profitability weren’t increased, the alternative was losing the industry completely.”

As a result, the Sugar Beet Advancement Program was born. MSU spearheaded the partnership with Michigan Sugar Company, which owns the brands Pioneer Sugar and Big Chief Sugar. MSU scientists, industry representatives, and sugar beet farmers worked side by side to reinvigorate production and yield.

Researchers from MSU Extension and AgBioResearch, Michigan Sugar Company, and the U.S.D.A. determined the scope of the problems that included diseases, seed germination rates, parasites, poor soil conditions, and unfavorable weather patterns. The MSU team worked on-site with farmers to change tillage practices and planting times, and to switch to pre-germinated seeds. Over several years, farmers gained a few tons of beets per acre. With additional advances in disease and pest control, by 2008, farmers yielded 29 tons per acre, nearly double the yield harvested at the lowest point in the previous decade.

Today, Michigan’s sugar beet industry has a net economic impact of $550 million annually, giving the state an indirect economic boost of $1 billion. Poindexter points out that without the cooperation and collaboration involving MSU, Michigan Sugar Company, and farmers, the industry wouldn’t be where it is today and, perhaps, wouldn’t exist. And Steve Poindexter made a critical difference.
Supporting Food and Agriculture

Farm Business Management

Dennis Stein, District Farm Business Management Educator for MSU Extension, provides a variety of relevant, important educational programs and resources for local farmers including farmland rental meetings; crop enterprise budget online templates; and optimizing dairy farm profitability in the areas of financial and partial budgeting. Dennis retired from MSU Extension on September 30, 2017. His contribution to farmers and to farm profitability through educational programs will be greatly missed. One important area where Dennis is the recognized expert in the state is in farmland rental.

Farmland rent is one of the largest single expenses on many farm operations. It is an important aspect of management if the farm is to remain economically profitable. For landowners, this often represents a large percentage of the household/retirement income. To obtain a WIN-WIN farmland rental arrangement, both the farm operator and landlord need to establish a positive working relationship and put in place sound written rental agreements. Over the years many disagreements and in some case severe economic losses occurred when verbal rental arrangements fell apart and landowners failed to get paid, or operators lost rented land based on missed communication.

Farmland rental meetings were led by Stein across the Thumb in 2016-17. This was in response to hundreds of direct phone and email contacts made to Stein as individuals attempted to gain information, education and resources to help them in the process of securing Win-Win farmland rental agreements. Participants included farm landowners and active farm operators who each wanted to gain more information on trends and issues impacting farmland values and farmland rental values.

These sessions were fast-moving reviews of issues and options that farmland owners and tenants/renters should consider when setting a reasonable farmland rental rate. Current market prices have an economic impact on land rents and forecast where rents are heading. These sessions considered both sides (landowner and tenant) of the farmland rental agreement issue, with an overview of information helpful in the development of a win-win farmland rental agreement. Agenda topics included:

- Current land and rental values; how are they trending
- Approach to farmland rental rates considering current economic situation
- Considerations for using alternative farmland rental agreements (Pro- Con)
- How some farms use Flex Rental agreements to share in profits
- What needs to be in a farmland rental agreement
- How to approach the cost of field drainage tile in a rental agreement

Link to Stein's online resources (budgets, cost of production and decision making tools: https://msu.edu/user/steind/
Supporting Food and Agriculture

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 Sandusky, 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.

Information in this article was taken from “Using Enviroweather 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.
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.
Developing Youth and Communities

4-H is America’s largest youth development organization, providing educational opportunities to over 6 million youth. The 4-H program offers a vast selection of project area topics—science, healthy living, arts, and civic engagement to name a few, all with the common delivery method of hands-on experiential learning. 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 Sanilac County/MSU Extension office at 810-648-2515. We would be happy to help you enroll today!

Our volunteers:

4-H programs are made possible by the service of our dedicated volunteers. “Independent Sector” recently stated that the estimated value of volunteer time in the United States is $24.14 per hour. At this rate, the time, knowledge, and expertise provided by volunteers in the Sanilac County 4-H program exceeds $300,000 annually.

Our volunteers allow us to do incredible things. The past year marked increase in the number of teens and alumni stepping up to take on leadership roles. We are making progress on our goal to have an equal number of youth and adults seated on local 4-H committees and sharing decision making responsibilities. Through shared leadership, the youth members of the committees are learning and practicing leadership skills that will be both beneficial to the current 4-H program as well as prepare the youth for future leadership roles in their community or career. During the past year, Sanilac County 4-H youth-led committees successfully planned and held 5 educational clinics for fellow 4-H members.

4-H advisory group volunteers from around the state including Sanilac took part in a training at Kettunen Center in November, 2016 that provided valuable resources for building youth/adult partnerships. They learned about the purpose of advisory groups and the importance of by-laws. Financial accountability and basic skills in communication and conflict resolution were also taught.
Developing Youth and Communities

Sanilac County 4-H had amazing years in 2016 and 2017! During the 2015-16 program year we had over 850 youth enrolled in Sanilac County 4-H clubs. During the 2016-17 program year, we had total 4-H club membership of 1,029 youth! This was made possible by our wonderful volunteers—307 adult leaders and 48 youth leaders! We are making progress on our goal to have an equal number of youth and adults seated on local 4-H committees, sharing decision making responsibilities. Through shared leadership, youth committee members learn and practice leadership skills that will be beneficial to the current 4-H program and also prepare them for future leadership roles in their community or career. This year, Sanilac County 4-H youth-led committees successfully planned and held 5 educational clinics for fellow 4-H members.

Last year, Sanilac County 4-H introduced youth to a new membership category: SPIN Clubs. A 4-H SPIN Club is a group of 4-H members that meets for a short period of time, typically 6 weeks, to learn about a specific topic or “special interest”. A youth may choose to participate in 4-H only during the SPIN Club, or they may enroll in a permanent 4-H club to continue participation. Our SPIN clubs included rabbit showmanship, scrapbooking, and archery. A new SPIN Club began February 1st featuring the topic of entrepreneurship. Activities focused on:

- developing entrepreneurial thinking,
- supporting youth business planning, and
- teaching business etiquette.

The group also learned about incorporating an entrepreneurship component into the projects they were already learning.

If there are SPIN Club topics that you would like to learn about or lead contact the MSU Extension office.

MSUE 4-H staff serving Sanilac County:
Betty Jo Krosnicki Educator
Colleen Wallace Program Coordinator
4-H Youth Development Clubs in Sanilac County

In the 2016-17 program year, there were 2,065 participants in 4-H Youth Development programs in Sanilac County. This included members of 4-H Community Clubs, Special Interest (SPIN) clubs, and youth in school enrichment programs. Through public outreach at parades, festivals, booths, and other public events, we reached approximately 10,000 people with information about 4-H. Our staff is working diligently to grow the program! Local events included:

**Thumb Area 4-H Camp** is held in July at Camp Cavell hosting 4-H members from Sanilac, St Clair, Huron, and Tuscola Counties. The 3 day, 2 night camp features archery, crafts, games, singing, swimming, and a mud hike. In addition, a day camp is held for Cloverbud members ages 5-8 years old.

Sanilac County 4-H Council hosted a successful new **Spring Fair** event in 2016 at Peck schools, and again in 2017 at the fairgrounds. Spring Fair provides 4-H members with a chance to have projects they have completed over the fall and winter months evaluated by a judge, receive feedback and make improvements before they enter it at the county fair in August.

Some of our club program areas:

- Many animal projects with strong enrollment in beef, dairy cattle, horse and pony, and swine projects,
- Communications and expressive arts,
- Shooting sports, soils and soil conservation,
- Leadership skills development, and many more!

MSU Extension hosted a training for the **National Endowment for Financial Education** in Sanilac County on November 9, 2016. The training was for school staff and others who teach financial literacy to youth. It was made possible through a national partnership between Extension and America's Credit Unions. The Sanilac training was attended by Extension, banking, and school staff from Sanilac and surrounding counties.
Developing Youth and Communities

Other 4-H learning opportunities

Sanilac 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. Youth and chaperones 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.

- **Michigan 4-H State Awards Program** - In 2016, Sanilac County was represented by 4 delegates. Two delegates won in the Group Award category.

- **Kettunen Center** - in Tustin is the site of 4-H trainings throughout the year. Workshops included Winterfest; Challenge U; Teens as Teachers; Shooting Sports; and Visual Arts, Crafts, Clothing, and Textiles.

Sanilac County 4-H selected members through an application and interview process this year to participate in several state and national citizenship and leadership conferences. One member was selected to attend **4-H National Congress** in Atlanta. Two were selected to receive scholarships to attend Michigan’s **4-H Capitol Experience** in Lansing. One was selected to attend the **Citizenship Washington Focus** at the National 4-H Conference Center in June.
Ensuring Safe and Secure Food

Reducing foodborne illness through education

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

In Sanilac County, Laurie Messing, MSU Extension Educator for food safety, provides programming in the areas of Food Preservation, Cooking for Crowds and ServSafe manager training for adults. In 2016-17, she provided ServSafe manager education leading to certification for 64 foodservice employees in Sanilac County from local schools, restaurants and churches. This national certification program teaches about foodborne illness, how to prevent it and how to train employees on the latest food safety issues including:

◊ providing safe food,
◊ forms of contamination,
◊ the safe food handler,
◊ the flow of food,
◊ food safety management systems,
◊ safe facilities & pest management,
◊ cleaning & sanitizing.

Messing teaches local seniors about keeping the produce safe that they receive with their Senior Market FRESH coupons. When purchasing fresh fruits and vegetables at local farm markets, proper washing and storage of produce is critical; these messages are reinforced when seniors receive their coupons. In the summer of 2016, she reached 220 seniors, and 180 seniors in 2017. Food safety education outreach was done at the Fantastic Fun Fair in Deckerville and provided education and information for over 300 families and kids. Kids and adults spun the MI Health Matters Wheel and answered questions about food safety to win prizes. Refrigerator thermometers were given to adults allowing them to be sure their refrigerator temperatures are 40° or below.

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.

Michigan FRESH fact sheets educate the public on the safe use, storage and preservation of Michigan grown fruits and vegetables. They were distributed through a local farm market, at Sanilac/MSUE office and at all food safety programs. Click here:

Michigan Fresh Fact Sheets
Improving nutrition for Michigan seniors

Senior Market FRESH:

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

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

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

Thanks to the Sanilac County Council on Aging and Building Ties Committee, additional funds were provided for the Market FRESH program for Sanilac County senior citizens. The funds were used to purchase additional coupon books, distributed to seniors in Sanilac County during July 2016. In total, 220 coupon books each worth $20 were distributed to provide free, fresh fruits and vegetables for local seniors. These coupons provided $4,400 in additional income for our local Farmers Markets and growers. The eligible seniors were very happy and grateful to receive the coupons. We had more than 40 seniors on a waiting list, but the Office of the Services to the Aging was able to provide Sanilac County with additional coupons to meet the needs of everyone on the waiting list. Redemption rate for coupons for 2016 was over 91%.
“Eat Smart, Live Strong”—Improving nutrition and increasing physical activities for Michigan seniors

Two Eat Smart, Live Strong nutrition education series were held in Sanilac County in 2016 for 19 senior citizens. This series combines education about eating more fruits and vegetables with adding more physical activity. During the six-week series, seniors set goals, tracked their fruit and vegetable intake and also tracked their physical activity levels. Participants became much more aware of what they ate and how active they were by the end of the series, and made changes to improve.

After completing the series, seniors said:

- I am eating a lot more fruits and vegetables and exercising some each day and walking everyday
- I have started to eat more fruits and fresh vegetables, stir fry's with vegetables, grilled and roasted vegetables
- I am eating more fruits and vegetables
- I am trying to eat more fruits and vegetables and also trying to cut down on salt
“Smarter Lunchroom” strategies—Making healthier lunchrooms in Michigan

**Smarter Lunchrooms** is an initiative that helps make school lunchrooms healthier through changes in the environment. This initiative is a component of Team Nutrition, a program of the USDA that works to help implement the School Meals Initiative for Healthy Children. The focus of Smarter Lunchrooms is to use easy, no-cost and low-cost changes to encourage students to select, eat, and enjoy healthier foods in school without eliminating their choice.

Michigan State University Extension is available to help implement Smarter Lunchroom strategies in schools throughout the state. MSU Extension provides coaching and technical assistance to schools throughout the process including:

- Conduct a pre and post assessment using the Smarter Lunchroom Scorecard.
- Helping a school choose and make 10 changes. Changes could include introducing creative names for food items and rearranging beverages.
- Assist schools to apply for grant funding to make larger changes such as purchasing a salad bar or a refrigerator.
- Help schools to write a success story to communicate the success of their Smarter Lunchrooms initiative.

**Smarter Lunchroom Initiative in Sanilac:** Marlette Elementary participated in a Team Nutrition Smarter Lunchroom grant program in 2016. The school lunchroom environments were assessed to determine areas for additional ways to promote healthy foods and enhance the eating experience for students. Utilizing grant funds, the school implemented additions to enhance the lunchroom environment. The photos below are examples showing the enhancements:

- My Plate wall sign
- Staff apron with My Plate logo
- Salad bar veggie choices with sneeze guard
Teaching youth about choosing healthy foods through hands-on education

Michigan State University (MSU) Extension partners with Michigan Department of Human Services (MDHS) to provide Supplemental Nutrition Assistance Program Education (SNAP-Ed), a free nutrition education program to reduce hunger and food insecurity and promote healthy eating habits. MSU Extension SNAP-Ed nutrition instructors teach youth, teens, adults and seniors how to make health a priority through an instructional series. The goal of the SNAP-Ed program is to increase the likelihood that those eligible for SNAP benefits will establish healthy eating habits and increase their time spent involved in physical activity, while staying within their limited food budget.

SNAP-Ed has the potential to reach Sanilac County youth in many different settings throughout the County. The partnerships are made through networking within our communities. SNAP-Ed is making an environmental impact in Sanilac County.

With community partners as host sites, MSU Extension staff presented information either in a series of 6 classes, or in single presentations to more than 362 youth and adults throughout Sanilac County. They taught youth and adults how to choose, prepare, and store healthful, safe foods that are also affordable and delicious. Youth and adult participants also learned how to keep eating in balance with physical activity to address overweight and obesity concerns.
Understanding connections between physical, mental, social and emotional health.

Gail Innis, MSU Extension Educator in Social Emotional Health, retired on December 31, 2016, and closed out her career with style! She taught many classes in Sanilac County in 2016 that promoted not only participant health and wellbeing, but often the health and wellbeing of their children. In all, 426 residents of Sanilac County, youth and adults, participated in at least one of her educational programs in 2016. Examples of her work include:

- **RELAX: Alternatives to Anger**—an educational program that helps participants gain knowledge and skills to constructively deal with anger. Core concepts include recognizing anger signals, empathizing, listening, accepting that others’ anger is not about you, and letting go of the past in order to maintain a present perspective. Participants learn to better manage anger and stress at home, in the workplace and in school.

- **Alternatives to Anger for Parents & Caregivers** provides an understanding of developmental stages of self-control and emotional literacy in children. Activities support social emotional development, reduction of stress and anger, improved communication skills and positive behavior.
  - Class on 3-1-16 in Sandusky reached 8 Sanilac participants.
  - A 4-week series provided at the request of the Department of Human Services, this class was held in Sandusky in November, 2016. Ten parents of ten children ages 0-12 participated.

- **Relax—Alternatives to Anger—teen/adolescent version**: This program was requested by the Juvenile Court Probation Officer in Sanilac County. Ten youth and one probation officer completed the series of 4 lessons

- **Together We Can**—This 6-week series was designed for people who are divorced with children, have children but never married, are helping to raise someone else’s children, or are in a relationship with someone who has children that are not theirs. Six people from Sanilac County completed the series in May, 2016. Lessons included:
  - Positive co-parenting relationships
  - Stress and conflict management strategies
  - Ongoing involvement of both parents
  - Money management/support for children
  - Healthy decisions about couple relationships

Encouraging healthy behaviors helps reduce health care costs by providing safe environments throughout a person’s life span.

Congratulations to Gail Innis on a distinguished career at MSU Extension, educating individuals and families.
• **Stress Less with Mindfulness** introduces participants to the practice of mindfulness to reduce stress. Mindfulness is paying attention in a particular way: on purpose, in the present moment and non-judgmentally to reduce stress. Research shows that mindfulness is effective in reducing stress-related symptoms like worry, depression and physical tension, and may be helpful in managing chronic conditions like cardiac disease and diabetes.

• **Girls’ Empowerment Day:** Innis partnered with local agencies to provide a day of education for high risk teen girls on 8-29-16. The Child Advocacy Center, Child Abuse Prevention Council, local law enforcement, Juvenile Court, Foster Care, Health Department, and DHS worked together to provide education for young women ages 9-18 at a day camp. Innis facilitated a session for 55 girls on Stress Management. Families returned at day’s end for a presentation by law enforcement and a resource fair, then shared a meal to close out the day. They reported improved knowledge of community services, warning signs of high-risk behavior, and ways to assist their teen.

• **Stress Less with Mindfulness—Laughter is Good Medicine:** Workshop on 6-28-16 in Snover for 8 participants at request of MOASH (Michigan Organization for Adolescent Sexual Health). Attendees: teen parents, women’s shelter staff, and MOASH staff.

• Ongoing staff development with Women’s Shelter Staff —Mindfulness introduction. 7 participants.

• **Outreach:**

  • Annual Community Baby Shower on November 3, 2016 sponsored by the Sanilac County Child Abuse Prevention Council. 88 pregnant women or those who had delivered in the past 3 months attended, all from Sanilac County. MSU Extension informed participants and vendors about our programs and services.

  • October 6, 2016—**Service Expo** (46 Human Services staff); and **Project Connect**—(86 high-risk adults impacting 270 family members). Purpose of the event: to educate community partner agency staff and high-risk adults in Sanilac County about MSUE services and programs.
Making the Most of Our Natural Assets

Lake Huron Regional Fisheries Workshops

Annual Great Lakes Fisheries Workshops bring communities together with fisheries research and management partners to discuss research findings, management updates and fishing trends. Fisheries and natural resource managers provide big picture context to what’s happening in the lakes and how it will affect fish populations for recreational, commercial and sustenance fishers.

In 2016, MSU Extension Sea Grant, in partnership with the Department of Natural Resources Fisheries Division, USGS Great Lakes Science Center, and local fishery organizations, hosted 4 evening regional workshops across Lake Huron’s coastline. Open to the public, the 2016 workshops provided valuable information and status updates on topics such as fish populations and angler catch data, forage or prey fish surveys, recovering native lake trout populations, status of Saginaw Bay perch and walleye, habitat restoration efforts, and more.

The workshops (held in Bay City, Bad Axe/Ubly, Cedarville, and Alpena) engaged 282 local fisheries stakeholders with fisheries research and management agencies. Participants attended from at least 35 counties, and included anglers, fisheries-related businesses (charter captains, bait shop owners, commercial fishing operators), resource management interests, educators, and media.

The 2017 Lake Huron Fisheries 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.

Partners involved in program development and delivery:

- DNR Fisheries Division
- USGS Great Lakes Science Center
- DNR Lake Huron Citizen Fisheries Advisory Comm.
- 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
Extension Educators Serving Sanilac County, Continued

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