



Ottawa County 2017 ANNUAL REPORT

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MESSAGE FROM THE DISTRICT COORDINATOR

CONTACT US

In his book Taking the University to the People, author Wayne D. Rasmussen said that the underlying philosophy of the Extension System has always been to “help people help themselves by taking the university to the people. The system evolved into an institution that is responsive to priority needs and focuses its resources on providing quality information, education, and problem-solving programs on real concerns.”



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This annual report to the Ottawa County Board of Commissioners will tell about some of those local priority needs, and about how Michigan State University Extension staff have focused resources on addressing those needs. This is certainly not a complete listing of our work in Ottawa in 2017, but it does highlight some key efforts that have been done with local citizens addressing local concerns by connecting the University to the People.

It is an honor to be able to highlight the work of so many exceptional MSU Extension staff who work for all of us in the community. And it has been an honor to work alongside the many talented and dedicated Ottawa County commissioners, the administrator and assistant administrator, and staff over the years. Together, we continue to make a difference for the citizens of Ottawa County. I sincerely thank you for your support.

MISSION:

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

Betty Blase District 7 Coordinator

2017 4-H CONNECTIONS

Ottawa County 4-H Clubs.....	46
4-H members (traditional club enrollment)	1,058
Special Interest program participation	776
Youth participating in school enrichment programs.....	3,177
Teen volunteers	43
Adult volunteers	209

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DISTRICT 7 DIGITAL REACH

From July 1, 2016 to June 30, 2017, there were more than 200,000 visits from District 7 which includes Ottawa 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.

Keeping Businesses Strong



When you support MSU Extension, you support food, agriculture, natural resources and the bio economy in your community.

Livestock Producer Education

For the seventh consecutive year, MSU Extension meat quality educator Jeannine Schweihofer provided education at the Byron Center Meat's annual producer appreciation and education day. Approximately 100 livestock producers were in attendance, with the majority from Ottawa, Allegan and Kent.

This year's program included a presentation on marketing meat to millennials, pricing, packaging, and how to tell your farm's story. In 2017, 91% of evaluation respondents indicated an increase in knowledge of meat marketing. Over the years, 50% of evaluation respondents indicate having made a change to their business as a result of this training. Two people changed their marketing strategy, five people have changes their feeding ratios and one person reported selling more animals through direct marketing versus the auction as a result of the program.



Participant Quote:

“I basically gain more confidence in what I'm raising and in selling. That is huge. And each event gives me a more

rounded education in the whole arena. Thanks.”

Supporting Beginning Farmers

MSU Extension also works to support people interested in becoming farmers through a variety of programs, including: [The MSU Extension Beginning Farmer Webinar Series](#), [The MSU Vets to Ag program](#), [The MSU Student Organic Farm Certificate Program](#), and the [MSU Institute of Agricultural Technology](#).

Keeping Businesses Strong MSU Product Center

Growing
Entrepreneurs
and the
Michigan
Economy

2017 Value Added Agriculture Award

Value-added Agricultural Producer Award: Mud Lake Farm

Kris and Steven Van Haitsma from Ottawa County were selected for the 2017 Value-added Agricultural Producer Award by the MSU Product Center. This award, presented at the annual “Making it in Michigan” conference recognizes agricultural producers who have created or captured value outside of traditional commodity production.



Mud Lake Farm specializes in greens, micro-greens and herbs for specialty markets selling to restaurants and through Community Supported Agriculture (CSA). They are interested in sustainability and utilize biomass-heated hydroponic greenhouses for year-round production. In 2014, they added a processing room and began selling handcrafted cordials made from elderflowers and ginger grown on the farm. In the past year, they began canning craft sodas from their cordials under the name St. Steve's Cordials and Sodas. The customer reaction has been very strong and the cordials and sodas are now carried in over 100 locations in Michigan and are shipped across the country through website sales.



Supporting Food and Agriculture



Michigan leads the nation in production of blueberries, considered one of the healthiest foods due to their high levels of antioxidants and vitamins A and C.

Ottawa County is ranked #2 in Michigan in production of fruits, tree nuts and berries.



Blueberry production:

Every year small fruit growers are faced with challenges from weather, pest and disease problems, and environmental regulations. In addition, small fruit growers continue to be confronted with new invasive insect pests. These challenges, along with increased expenses and falling berry prices, have resulted in reduced farm income.

The Michigan small fruit industry relies heavily on MSU Extension. For underserved, minority, new and beginning farmers, MSU Extension programming and technical assistance is the only technical support for their operations. Our Integrated Pest Management programs provide small fruit growers with education on how to combat the major pests of berry crops, and prevent pesticide resistance as well as non-target impact.

Michigan State University researchers and MSU Extension staff worked with local growers throughout the 2017 season. This work includes:

-Blueberry Kickoff Meeting—March 30 at Trevor Nichols Research Center

-Pre-bloom meetings—April 27 (South Haven) and May 11 (Fillmore Complex) In 2017, priorities for the small fruit team were to provide assistance on issues related to:

- Protection of insect pollinators from pesticide exposures
- Control and management of the new secondary pest outbreak, the Blueberry Stem Gall Wasp, a serious threat for the blueberry industry in west central Michigan.
- Advances on the control and management of the Spotted Wing Drosophila (SWD), the pest that is the most critical issue for the Michigan small fruit industry.

-Integrated Pest Management training—held in March, April, June and November. Goal of these trainings is to prevent pesticide resistance and non-target impact.

-Gall Wasp Meeting—May 3 in Port Sheldon

-2017 Systems Approach to Managing Spotted Wing Drosophila—June 5; Trevor Nichols Research Center. New concepts and research advances on the control and management of the SWD using a Systems Approach.

-Pre-harvest meeting on June 29; Trevor Nichols Research Center, with education on irrigation, nutrition management, harvest-time insect management, insecticides and the weather, blueberry pre- and post-harvest disease control, and performance of the new MSU cultivars (Draper, Liberty, Aurora, Huron).

Supporting Food and Agriculture

Breakfast on the Farm



Breakfast on the Farm gives consumers and farm neighbors a first-hand look at modern food production, and the farm families who work hard to produce a safe, wholesome food supply for Michigan communities and the world.



Breakfast on the Farm in Ottawa

The Ottawa County Breakfast on the Farm event was held on Saturday, June 24, 2017 at **J&J Dairy**, near Marne, MI. There were **2,632** attendees at this very successful event—2,392 participants and 240 volunteers!

J&J Dairy supports three Van Dyke families. They are passionate about farming and opened up their farm for people to see and experience. It takes 650 milking cows to support these families. They raise 1,000 acres of corn and alfalfa and feed it all to their cows. The Van Dykes, along with volunteers representing various sectors of agriculture, explained the dairy operation to attendees and answered questions.

The event was held from 9 a.m. to 1 p.m. with breakfast served from 9 to noon. This fun family-friendly educational event was free and open to the public, but tickets were required. Tickets were available for pickup at local Extension offices and many other locations throughout Ottawa, Muskegon, and Kent Counties.

Charles Gould with Ottawa County MSU Extension and Joe Austin with the Ottawa County Farm Bureau co-chaired the event, with tremendous support from Ashley Kuschel with the MSUE Breakfast on the Farm program. Nearly \$25,000 was raised locally for the event. Many sponsors provided generous financial and in-kind support. Channel 13 WZZM, Grand Rapids, did a live feed the day before the event which was aired multiple times. Articles about the event appeared in local newspapers and internet news feeds.

Since 2009, more than 85,000 children and adults have attended Breakfast on the Farm events throughout Michigan to learn about where food comes from. At these events, attendees had a chance to learn how cows are milked, pet a calf, take wagon rides, see tractors and eat ice cream. Questions about farming and food production are encouraged.

Thank you to the members and staff of Ottawa County Farm Bureau, generous donors, many volunteers, and the Ottawa County Sheriff's Department for their help in making this important agricultural education event a success!



Farm Business Development



MSU Extension works to connect producers with the resources of Michigan State University to address current issues in the field.

**Pictured above:
Lodged soybeans.
Photo by MSU
Extension Educator
Mike Staton.**



MSU Soybean Variety Performance Trial Tour

MSU Extension Educator Mike Staton, along with the host producer and two local agribusinesses (CHS Agronomy and Zeeland Farm Services—ZFS) planned, promoted and conducted a tour of the MSU soybean variety performance trial near Hamilton. More than 25 local soybean producers and agribusiness representatives participated.

Soybean lodging was a serious problem across the state; tour participants saw first-hand that some varieties stood straight while other were flat (lodged) and badly tangled. Lodged plants slow harvest operations and increase harvest losses. Variety selection is one of the best ways to reduce lodging. Photos from a commercial field in Allegan County and the MSU performance trial were used in a state-wide MSUE News article (http://msue.anr.msu.edu/news/recommendations_for_harvesting_lodged_soybeans). The article was picked up by several leading agricultural publications and received 613 page views in 2017.

Staton was also invited to speak about soybean seed treatment performance for reducing soybean cyst nematodes at two meetings hosted by ZFS in 2017 reaching more than 90 producers. One meeting was held in Zeeland and one in Frankenmuth.

Soybean Management and Research Technologies (SMaRT)

The SMaRT program is a partnership between MSU Extension and the Michigan Soybean Promotion Committee. The program's goals are to help Michigan soybean producers **increase yields and income through on-farm research, educational meetings and timely and relevant articles**. An educational meeting was held in Hamilton on January 19, 2017 to present 2016 SMaRT research results, gather input for 2017 trials and recruit new cooperators. Fifty-five (55) soybean producers and agronomists participated.

A 32-page 2017 SMaRT Research Report was mailed directly to nearly 90 soybean producers in Ottawa County in December 2017. The report summarized results from nine projects evaluated in 56 individual on-farm research trials. The online version of the report is available at: <http://fieldcrop.msu.edu/soybeans/>

Dairy Production



- Ottawa County ranks 9th in Michigan milk production.
- Dairy is 3rd in agricultural economic importance in Ottawa County.
- Milk generates \$58.1 in sales.

(From the 2012 USDA Ag Census.)

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Young Progressive Dairy Group Meeting

On November 7, MSU Extension educator Martin Mangual met with a group of 13 young dairy producers in Zeeland. The meeting was held on a farm with automatic calf feeding technology. Participants were able to tour and learn from the experiences of the farmer with this technology. Participants also learned from speakers about important points to consider with this technology, specifically facility design and management practices.

Dairy Nutrition Roundtable Discussions

This roundtable discussion, held in December, 2017 in Comstock Park, provided an open forum for participants to discuss current issues in dairy cattle feeding and nutrition, and an opportunity to ask questions of specialists. Dairy nutrition faculty from MSU included Dr. Mike Allen, Dr. Adam Lock, and Dr. Herb Bucholtz. In addition, dairy nutrition industry professionals that serve dairy farmers in west Michigan also provided information. Topics included trends, research, and concerns in dairy nutrition.

Puerto Rico Dairy Labor Training and Management

Faced with a shrinking domestic workforce, dairy producers in Michigan have increasingly turned to foreign-born workers. However, while farmers have complied with the labor laws, the risk of illegal workers has held back producers who desire to do what is right, but cannot determine the legal status of employees. In addition, the risk of employee turnover has been too high on many farms.

This project will educate and prepare Michigan dairy farm employers for employment of screened and trained employees from Puerto Rico. These workers are legal residents of the US. The project will set up a sustainable system by establishing a partnership with Extension faculty and staff at the University of Puerto Rico to provide the initial steps of screening and training in Puerto Rico, and a system to bring employees to dairy farms that enroll and qualify for the program.

The project will also work individually with farms to identify and reduce their employee turnover rate through teaching them improved employee management and hiring practices, and improved cultural understanding.

Greenhouse & Nursery Production



Hemlock woolly adelgid. Photo by Leslie J. Mehrhoff, University of Connecticut, Bugwood.org.

Hemlock woolly adelgid

Hemlock trees are a key tree species in Michigan's forests. Hemlock woolly adelgid is a potential major pest of eastern hemlock. It decimated stands of native hemlock in the eastern U.S., particularly in Smokey Mountains National Park. It has now been found in four western lakeshore counties: Allegan, Ottawa, Muskegon and Oceana.

The Michigan Department of Agriculture and Rural Development is monitoring active sites and by July 5, 2017, had established an interior quarantine to regulate movement of hemlock plants within and out of the four affected counties. The regulation applies to any hemlock with needles, including nursery stock, uncomposted yard waste and other hemlock tree parts. In February 2017, Michigan State University was awarded a \$1 million grant to help battle hemlock woolly adelgid and other invasive species.

MSU Extension and MDARD have collaborated to create resources for commercial growers and homeowners. Two new videos were released in 2017 on hemlock woolly adelgid, explaining the insect and its threat to Michigan, as well as three bulletins.

An educational meeting on the insect was held at the Fillmore Complex on July 25. Twenty-five growers attended the meeting taught by Dr. Dave Smitley (MSU) and Mike Bryan (Michigan Dept. of Ag). Growers represented over 1000 acres managed and \$126,500 in gross sales of hemlocks. Two-thirds of participants will make a management change as a result of the workshop (n=9), 66% within the next 3 months. These changes will impact at least 600 acres of production and protect at least \$126,500 of hemlocks in Michigan. Attendees estimated the value of information learned was worth up to \$72,000.

Michigan Seedling Growers Association summer meeting

MSU Extension's support for nursery and Christmas tree industries utilizes field educators, campus-based specialists and researchers to provide educational programming.

Michigan Seedling Growers are faced with labor and pest/disease challenges when growing conifer seedlings. On August 24, 2017, the annual Michigan Seedling Growers Association meeting was held in Zeeland. Twenty-five farms from at least five counties attended. The program offered guest speakers including: Dr. Greg Bonito, Dr. Bert Cregg, Dr. Monique Sakaladis, all from Michigan State University, and Craig Anderson from Michigan Farm Bureau. Topics covered: mycorrhizal relationships with trees, MSU plant nutrition update, update on pathology research at MSU, and updates to immigration and labor laws.

Of the 25 evaluations distributed, 4 were received back. Three farms planned to make a change to production practices within the next 4-6 months. These changes impacted 8,165 acres of conifer/nursery production.

What difference did it make - public value? Growers learned about intercropping of mushrooms and also how mycorrhizal fungi help the growth of their trees. Risk was mitigated talking about fine-able offenses for harboring illegal immigrants as labor.



Safe Food Personal Finance



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

In Ottawa County and surrounding counties, Jane Hart, MSU Extension Educator for food safety, provides programming in the areas of **Food Preservation, Cooking for Crowds and ServSafe manager training for adults**. In 2017, she provided ServSafe manager education leading to certification for **20 foodservice employees** from Ottawa County who are employed with local schools, restaurants, churches, or child care providers. 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.



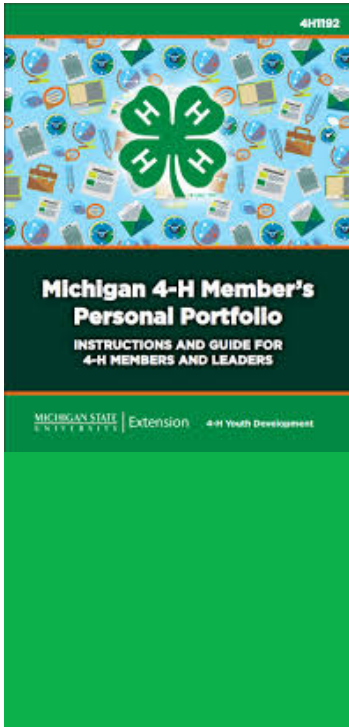
Additionally, Hart worked with residents of Ottawa County on food preservation for their CSA (Community Supported Agriculture) shares at the Christian Fellowship Assembly in Allendale, and taught Cottage Food Law, canning basics, and Cooking for Crowds to audiences that included Ottawa residents .

Personal finance

MSU Extension promotes financial capability and stability through money management and homeownership education programs. In 2017, two Credit and Debt Management Workshops were provided during the Annual Challenge of Children Conference held at Hope College in Holland. Community members were also able to access additional money management programs and resources through our online formats and workshops offered at neighboring counties. For more information about MSU Extension money management and housing education programs, please contact Jinnifer Ortquist at ortquisj@anr.msu.edu or visit www.mimoneyhealth.org.



Developing Youth and Communities



Developing Youth and Communities

4-H is America's largest youth development organization, providing educational opportunities to over 6 million youth. The 4-H program offers a vast selection of project area topics—science, healthy living, arts, and civic engagement to name a few, all with hands-on experiential learning for youth. 4-H programs are available for all youth ages 5-19, and are made possible by the service of our dedicated volunteers. We always welcome new members and new volunteers; if you are interested in joining 4-H, please contact the Ottawa County/MSU Extension office at 616-994-4580. We would be happy to help you enroll today!

4-H learning opportunities

Ottawa 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 at MSU, lived in a dorm, ate in the cafeteria and attended Exploration Days classes they chose. Class sessions ranged from learning how to play a sport, weave a basket, learn a new language, show a chicken, open a checking account, or meet with a college admissions office.
- **Michigan 4-H Livestock Judging**-Ottawa 4-H was well represented in the Senior Livestock Judging state awards in 2017. The team from Ottawa included Darren Kulicamp, Tyler Rozema, Cody Kulicamp and Owen Busman. They placed 6th in the High Team Overall score, and Darren placed first in the Senior Livestock Judging individual scores.
- **Kettunen Center** in Tustin is the site of 4-H trainings throughout the year. Workshops included Winterfest; Challenge U; Teens as Teachers; Shooting Sports; Visual Arts, Crafts, Clothing, and Textiles.



Developing Youth and Communities



When you support MSU Extension 4-H programs, youth participants learn life skills that prepare them for the workforce – especially for highly sought after jobs in science, technology, engineering and mathematics (STEM).

Each summer at one of the three fairs in Ottawa County, many youth have the opportunity to show animals, talking with a judge about what they have learned over the course of the year in raising this livestock. For some youth, this experience can present an additional challenge, as it did for Dalton Budrew when he decided to show his steer even though he is confined to a wheel chair.

Thanks to some good teamwork by Ottawa 4-H staffer Melissa Haug and the Hudsonville Livestock 4-H committee, they were able to adapt the market beef program in order to accommodate Dalton's request. Dalton showed his steer at the Hudsonville Community Fair, as you can see in the photo below. Congratulations, Dalton!



Ottawa County 4-H offered a wide array of programs in 2017. We work together with youth, parents, and partner agencies to provide learning opportunities tailored to meet youth interests and build 21st century competencies. We have expanded programming to include partnerships in all corners of the county, focusing on finding sites where we have not programmed before. Staff led activities in Holland, Grand Haven, Spring Lake, and Hudsonville that covered topics from gardening to architecture to wizardry (for the 20th anniversary of the release of the *Harry Potter* series!)

4-H maintains its commitment to working with underserved audiences through programs at the Holland Rescue Mission and at Boys and Girls Club of Greater Holland. In 2017, staff worked with elementary and middle school age youth on cultural competency, team building and communication, outdoor adventure skills, STEAM projects, fine arts, and more. By exploring a variety of projects and programs, we ensure that youth from all backgrounds find a place in 4-H.

4-H Youth Development



Ottawa 4-H alum and current volunteer competes at national level

Pam Potter, Hilltop Gang 4-H leader for livestock and shooting sports, recently shared with us a wonderful success story about her daughter Colleen. Colleen became active with archery in our 4-H program here in Ottawa County, and went on to join the MSU team. She would tell you 4-H has played a big role in her life.

Colleen, who attends Michigan State University, was very successful in 2017 as a member of the MSU Archery Club.

At U.S. Collegiate Indoor Nationals where they shoot 18 meters (~19.6 yards), Colleen placed 6th in Female Bowhunter division.

She competed at 2017 US National Outdoor Collegiate Championships where they shoot from a distance of 50 meters (~54.6 yds). Colleen qualified 7th in the Female Bowhunter division and ended up 5th overall in elimination rounds, and took bronze in Mixed Bowhunter Team.

She received these honors:

- Named to the **2017 Collegiate Archery Program All-American Team** (Female Bowhunter Division)

This team is composed of to the Top 25% of archers in each Division and Class (maximum 10), calculated by taking the combined score from the U.S. National Indoor Championships and the qualification round of the U.S. National Outdoor Collegiate Championships. Colleen is one of the seven members of this team.

- Named to the **2017 Collegiate Archery Program All-American Academic Team** (Female Bowhunter Division)

The All-American Academic Team is composed of the Top 10 archers in each Division and Class based on the following criteria:

Archer must have been eligible to shoot in the 2016 Spring semester (Full time student).

Required Cumulative GPA of 3.0 for Undergraduate Students and 3.5 for Graduate Students through fall semester 2015

The top 25% (ranked by score) of each division and class from U.S. Indoor Nationals. Archers are then ranked by GPA (a tie on GPA will be broken by the score from the U.S. National Indoor Championships).

Colleen is one of 9 archers named to this team, **and she has the highest ranking GPA for the group. Congratulations, Colleen!**



Keeping People Healthy

Social-emotional health involves social, mental, and psychological aspects of an individual's life across the lifespan.

This includes forming and maintaining satisfying and healthy relationships, taking another's perspective, resolving interpersonal conflict, feeling capable and complete, expressing emotions, navigating stress, having supportive relationships, and having a positive sense of self.



Social and Emotional Health

The Nurturing Families Series works to educate parents, grandparents, childcare providers and others who care for children, ranging from birth to teens. This course is based on research showing that children who receive affection and nurture from their caregivers have the opportunity for healthy development. Participants in this course learn how to enhance positive relationships with children, how to discipline without spanking, child growth and development, how to handle stress and anger, and how to help build self-esteem. Six series were offered in Ottawa County with 29 adults 2017.

RELAX: Alternatives to Anger is an educational program that actively engages participants to gain knowledge and skills to constructively deal with anger. The 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 their anger and stress at home, in the workplace and in school. In 2017 there were 22 RELAX: Alternatives to Anger Series offered in Ottawa County with 63 participants.

Powerful Tools for Caregivers is a new evidence-based program offered by MSU Extension. Informal family caregivers of adults with chronic conditions provide unpaid care estimated at 470 billion dollars a year in the US. Caring for a family member or friend with a chronic condition can be physically, emotionally, and financially draining. In six weekly classes, caregivers develop a wealth of self-care tools to: reduce personal stress; change negative self-talk; communicate their needs to family members and healthcare or service providers; communicate effectively in challenging situations; recognize the messages in their emotions, deal with difficult feelings; and make tough caregiving decisions. One series was offered in Ottawa County in 2017 with 15 participants.

Keeping People Healthy

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



Improving nutrition for Michigan seniors

Market Fresh:

Market Fresh (formerly known as Senior Project Fresh) provides seniors who qualify with unprocessed, fresh Michigan-grown produce from registered Farmers Markets and roadside stands throughout Michigan. In Michigan, Market 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.

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.

In 2017, MSU Extension partnered with Ottawa Food to deliver the nutrition education component for Market Fresh. Approximately 250 coupon books each worth \$20 were distributed to seniors in **Ottawa County**. These coupons provided \$5,000 to local seniors for fresh fruits and vegetables, and meant additional income for our local Farmers Markets and growers. The eligible seniors were very happy and grateful to receive the coupons.

In 2017 we also partnered with Ottawa Food to deliver cooking classes at the Christian Fellowship Assembly pantry on nights when participants picked up their CSA shares from a local producer. Instructor Amy Prins reached 35 participants throughout the growing season with cooking demonstrations, food safety information, recipes and preparation tips to educate them on how to use the fresh produce they received.

Keeping People Healthy

The Supplemental Nutrition Assistance Education Program (SNAP-Ed) teaches participants how to establish healthy eating habits and increase their time spent being physically active, while staying within a limited food budget.



Boys and Girls Club of Holland afterschool program

Cooking Matters

Cooking Matters for Adults is a nutrition program where participants learn how to eat healthy, cook and grocery shop on a limited budget. The program consists of six lessons, lasting approximately two hours each. With the help of an experienced chef and nutrition educator, participants gain skills and confidence to make healthy, budget friendly meals for their family.

In 2017, MSUE nutrition instructor Amy Prins partnered with Maplewood EEC in Holland to hold Cooking Matters for Parents classes for their participants. The focus of these classes was on feeding picky eaters healthy foods and portion sizes for small children. She also provided the Cooking Matters programs for participants at St. John's Episcopal Church in Grand Haven.

Each week, participants received take-home food, which they could use to practice a recipe they learned in class. Other activities:

- Participatory food preparation with cooking and food safety instruction
- Engaging nutrition activities and discussion
- Interactive grocery store visit and \$10 challenge
- Practice with food budgeting
- Recipe book for use at home
- Certificate of completion

Other nutrition education programs done by MSU Extension staff in Ottawa during 2017 include:

Harbor House, located in Holland, is a substance abuse recovery house for women that Prins has been working with for over five years. She uses the curriculum "On My Way to Wellness". They discuss how important it is to exercise, portion control and eat from all five food groups. These classes help aid and maintain optimum health on their recovery journey.

Coopersville Cares is a food pantry in Coopersville. Prins started a class there in November 2017. She meets with participants once a month coinciding with the Feeding America Food Truck delivery. They discuss healthy cooking methods and different uses and recipes for the foods on the delivery.

Love INC food pantry in Hudsonville, Boys and Girls Club of Holland, Woodside Elementary, K-6 in the West Ottawa School district, the Meet Up Eat Up lunch program in Hudsonville at Presidential Estates are some of our many nutrition partners in the community.

Keeping People Healthy

MSU Extension helps people apply research in order to make positive changes in their lives. We empower individuals with the knowledge they need to make healthy choices.



Lay leaders creating healthy drinks during the Making Smart Drink Choices nutrition lesson.

Chronic Disease Prevention and Management

Michigan State University Extension's strengths are our community-based approach to program delivery and our efforts to serve the needs of Michigan's residents in urban, suburban and rural settings. We promote healthy lifestyles and equip Michigan residents to take control of their personal health through facilitation and education.

In 2017, we piloted a program in Ottawa county called "Faithful Families: Eating Smart and Moving More" with the Jesus Christ of Latter Day Saints Church in Spring Lake. This program promotes healthy eating and physical activity in communities of faith. The group met monthly to attend nutrition education. Each lesson included a taste testing of a healthy recipe and a physical activity led by a lay leader from within the faith site. 25 women attended. The site also made some changes to its policies, practices and environments and developed a wellness budget, shared healthy messages with all church members, and is planning a 5K run/1k walk for 2018 that will involve the entire family. Approximately 500 church members have the opportunity to benefit from these changes.

Other education we provide includes:

[Dining with Diabetes](#)

The 5-session series includes research-based education, food preparation demonstrations and healthy recipe tasting. Targeted toward people who have been diagnosed with Type 2 diabetes and members of their support system.

[National Diabetes Prevention Program](#)

For people who have been diagnosed with prediabetes or have risk factors for Type 2 diabetes. Participants attend 16 weekly sessions focused on nutrition, physical activity and environmental changes, then 6-8 monthly follow-up sessions.

[PATH](#)

For people living with chronic conditions like diabetes, heart disease, asthma, arthritis and chronic pain. Participants learn skills so they are better equipped to face the daily challenges of living with chronic conditions. Two specialized PATH workshops are also available: PATH—Diabetes and PATH—Chronic Pain.

[Matter of Balance](#)

Consists of 8 two-hour sessions aimed at reducing the fear of falling and increasing activity levels and confidence among older adults. Throughout the course, participants establish goals for increasing activity, identify modifications to their environment to reduce fall risk, practice strength and balance exercises and learn from each other.

For more information go to MSU Extension's Chronic Disease webpage, or you can contact **Christi Demitz, Educator**, demitzch@anr.msu.edu or 616-632-7881.

Making the Most of Our Natural Assets



Unhooking a Chinook salmon on the deck of a Lake Michigan charter boat. Lake Michigan charter trips and salmon remain a big draw and consistent part of coastal tourism.

Photo:
Michigan Sea Grant

Lake Michigan's charter fishing industry is remarkably stable

Article written by [Dan O'Keefe](#), MSU Extension, Michigan Sea Grant

It doesn't make for sensational headlines, but charter fishing has been a consistent part of coastal tourism despite recent ups and downs in fishing success.

For the past 10 years as a Sea Grant Extension Educator I've worked to understand the economic impact of Michigan's charter boat industry. This has big implications for coastal tourism. In 2016, charter fishing generated \$23 million in Michigan's coastal communities, resulting in 476,361 employment hours. Lake Michigan's charter fishery is the largest, accounting for around 70 percent of the state's charter fishing effort according to [Michigan DNR](#). Charter captains in Michigan report their catch and effort to DNR, and [Michigan Sea Grant](#) uses this information to [calculate economic impacts](#) and investigate trends.

Big salmon are a big draw

The Chinook salmon is a prized species on Lake Michigan; however, in 2016, charter harvest rate of Chinook salmon fell to the lowest it has been since 1995, when bacterial kidney disease (BKD) wiped out many of the lake's salmon. According to [Michigan DNR](#), charter harvest in Michigan waters of Lake Michigan ranged from 1.09 to 1.94 Chinook salmon per trip in the early 1990s, ranged from 2.24 to 7.40/trip 1996-2014, and fell from 2.27/trip in 2015 to 1.94/trip in 2016. Data from 2017 are not yet available.

This understandably caused a lot of concern among charter captains last year. Angst was compounded by plans to reduce stocking, although the goal of the [stocking cut](#) was to prevent a complete crash in the fishery. Some of the debate centered on which species to cut: [lake trout or Chinook salmon](#).

A recent [study](#) funded by Wisconsin Sea Grant found that Wisconsin anglers on Lake Michigan are willing to pay more to target Chinook salmon (\$140/trip) vs. lake trout (\$90/trip). An earlier [study on the Lake Huron charter fishery](#) found that the decline of Chinook salmon catch rates was linked to a 51 percent drop in charter fishing effort and resulting economic impacts, although increasing gas prices in the late 2000s were also a factor. During the Lake Huron charter fishing crash of the mid-2000s lake trout catch rates remained high. But what does this all mean for Michigan waters of Lake Michigan?

(continued on following page)

Making the Most of Our Natural Assets



Michigan Sea Grant helps to foster economic growth and protect Michigan's coastal, Great Lakes resources through education, research and outreach.

A collaborative effort of the University of Michigan and Michigan State University Extension, Michigan Sea Grant is part of the NOAA-National Sea Grant network of 33 university-



Grand Haven South Pier Inner Light
Photo by Betty Blase

Charter Fishing Industry Success, cont.

Consistent economic impacts are the rule

Despite low Chinook salmon catch rates in 2015 and 2016, charter trips and resulting economic impacts did not exhibit the same kind of crash that occurred in Lake Huron around 2004. In fact, Lake Michigan charter trips remained above the post-BKD average of 11,577 trips/year in 2015 and 2016 according to [Michigan DNR](#).

A [2009 charter economic study](#) found that the economic impact of charter fishing around Lake Michigan averaged \$14 million; due to economic factors (e.g., rising gas prices, recession) this fell to \$11.6 million in 2009. After adjusting for inflation, this means that Lake Michigan charter fishing generated an average of \$15.7 million in Michigan and bottomed out at \$12.6 million in 2009. In 2016, [Michigan Sea Grant](#) found that Lake Michigan charter fishing generated \$15.7 million in economic impacts for Michigan coastal communities. Dead on average, despite the low Chinook salmon harvest rate.

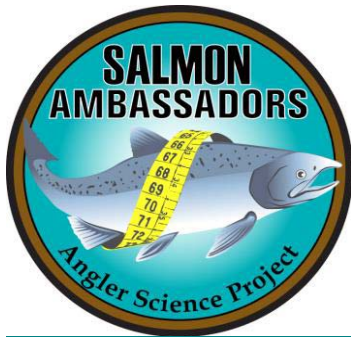
Few fluctuations relative to Huron

The fact of the matter is that Lake Michigan's charter fishery has been much less volatile than Lake Huron's, both in terms of harvest rates and economic impacts. While Lake Michigan harvest rate dropped to just under two Chinook salmon per trip in 2016, Lake Huron crashed to fewer than one Chinook salmon every two trips (Michigan DNR data) and economic impacts of charter fishing fell by more than 50 percent.

In other words, anglers could still expect a good chance that their boat would harvest a Chinook on Lake Michigan last year while this was not the case after the decline of salmon on Lake Huron. Other species (including lake trout, coho salmon, and steelhead) play an important role in the charter fishery, too. Many anglers are thrilled to catch any of our Great Lakes trout and salmon, all of which make good eating and top out at an impressive size.

Given the recent troubles with predator-prey balance in Lake Michigan and the high prey consumption of Chinook salmon, we can expect a more diverse mix of predators in the future along with modest Chinook catch rates. The good news is that the economic impacts of Lake Michigan's charter fishery appear to be quite stable so long as anglers can still expect a reasonable chance at boating a 'king.'

Making the Most of Our Natural Assets



Salmon on the fish ladder in the Grand River.
Photo by Betty Blase

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Salmon Ambassadors

2014-2017 Results

The *Salmon Ambassadors* program asked anglers to measure each and every Chinook Salmon caught over the course of the fishing season and check each fish for an adipose fin clip. Fin-clipped fish had been stocked in Lake Michigan, while un-clipped fish were wild. Chinook Salmon are not native to Lake Michigan, but they have been reproducing naturally in tributaries of Lake Michigan and Lake Huron for several decades. Many anglers are not aware of the important role these wild salmon play in maintaining the popular and economically important recreational fishery.

We had 81 volunteers provide useful data sets in at least one of the past four years. Volunteers provided useful data on 8,474 stocked and wild Chinook Salmon from Lake Michigan and northern Lake Huron. In Lake Michigan, wild fish accounted for the majority of the catch. Southern Michigan ports including Grand Haven and Holland ranged from 68-75% wild Chinook salmon. Northern Michigan ports close to prime spawning rivers ranged from 73-84% wild. Survey results indicated that volunteers were somewhat skeptical of plans to reduce Chinook Salmon stocking, but they had a higher degree of trust in % Wild estimates than other scientific data used in fisheries decision-making.

The *Salmon Ambassadors* program is a Michigan Sea Grant initiative developed in coordination with Michigan, Wisconsin, Illinois, and Indiana DNRs, and the U.S. Fish & Wildlife Service. This program would not be possible without the effort of dedicated volunteers from organizations including Michigan Steelhead & Salmon Fishermen's Association and Michigan Charter Boat Association. Special thanks go out to Detroit Area Steelheaders, who provided generous donations to support this program.

	2014		2015		2016		2017	
	Salmon Caught	% Wild	Salmon Caught	% Wild	Salmon Caught	% Wild	Salmon Caught	% Wild
Lake Michigan								
N Wisconsin	321	62%	331	69%	432	59%	245	67%
S Wisconsin	393	57%	35	40%	264	60%	0	NA
Illinois & Indiana	63	67%	0	NA	82	70%	7	86%
N Michigan	1,444	73%	542	75%	699	84%	407	73%
S Michigan	996	71%	749	74%	359	68%	491	75%
N Lake Huron	234	82%	30	30%	159	33%	155	22%

To read the entire report, please go to this website: <http://www.miseagrant.umich.edu/wp-content/blogs.dir/1/files/2018/02/Salmon-Ambassadors-Results-2014-2017.pdf>

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