



Leelanau County

2016–2017 ANNUAL REPORT

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FROM THE DISTRICT COORDINATOR:

MSU Extension staff continue to provide education and outreach on needs facing Leelanau county residents. Our recent needs assessment utilized focus group and online survey input to solicit feedback from the public on what are the most vital needs and priorities for Michigan residents. These results have provided a local direction and educational focus to meet the emerging, critical issues facing Leelanau County residents.



Your local MSU Extension staff have linked the knowledge resources of MSU directly to individuals, communities and businesses over the past year. It is my distinct privilege to present these accomplishments in our annual report. This report summarizes the important work done by MSU Extension staff in Leelanau County. It has captured most of the significant highlights of our work in 2016 and provides a sense of the direction of our work into the future.

As always, I thank you for your continued support every year. Without you, we would not be here doing this important work with your constituents.

Jennifer Berkey

 District 3 Coordinator

MEASURING IMPACT:

CONNECTING WITH RESIDENTS

4-H: Developing Youth & Communities	1,036
Keeping People Healthy.....	970
Supporting Agriculture & Agribusiness.....	617
Fostering Strong Communities & Businesses, and Enhancing Our Natural Assets	434

TOTAL PARTICIPANTS IN LEELANAU..... 3,057

MSU EXTENSION'S EXPANDED DIGITAL REACH STATEWIDE:



3.7 million visitors viewed more than 7.2 million pages



1.3 million topic newsletters distributed to more than 16,900 email addresses



Nearly 3,500 Facebook and more than 2,800 Twitter followers

Statewide 2015-16 Digital Reach

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DEVELOPING YOUTH AND COMMUNITIES

Michigan State University Extension 4-H program youth participants learn life skills that prepare them for the workforce – especially highly-coveted careers in science, technology, engineering, the arts, and mathematics (STEAM). Extension programs help children develop early literacy skills that support school readiness. In 4-H they learn leadership and decision-making qualities that increase their likelihood of becoming civically active. 4-H'ers demonstrate fewer high-risk behaviors, such as drug use, and they learn to complete tasks, solve problems, and are more likely to seek help from peers and adults when needed. Being part of 4-H also helps participants avoid or reduce involvement with the judicial system. This ensures that more young people succeed in school, attend college, and contribute positively to their counties. Having successful young people results in greater tax revenues and consumer spending, while increasing the likelihood that young people will stay in, or return to, their communities.

Leelanau County: 4-H Grows Here!

Leelanau County youth benefit greatly from the exciting 4-H programs offered close to home. This last year, area young people enjoyed a wide variety of 4-H learning experiences. 4-H offered everything from traditional clubs, after-school clubs, short-term clubs, and academic enrichment opportunities, to educational events, workshops, community outreach, and camps.

- Leelanau 4-H archery club met this fall in Maple City, across the road from Myles Kimmerly Park. 35 youth and adults worked on their shooting skills, and most were right on target!
- The annual 4-H Learn to Ski/Snowboard program had youth swooshing down the white slopes of The Homestead.
- Other 4-H youth learned responsibility through our Tractor Safety and Snowmobile Safety programs.
- The 4-H MAUD Squad, led by a former chemist, will use stereomicroscopes, purchased through a grant received this year, to give 4-H'ers a “close encounter” with both natural and man-made materials and the chance to explore different scientific topics of interest.
- Young equestrians were able to take part in our annual, and highly-popular, Horse Camp in August, with award-winning leader, Eleanor Miller and several of her 4-H teen leaders helping them learn about, take care of, and ride horses for a week. Camp culminated in a horse show for their families.
- Several clubs actively focused on relevant project areas including community service, Lego robotics, earth and marine science, and emerging technologies.



4-H participants reported higher academic competence in grades 7, 9, 11 and 12, and higher school engagement at grades 11 and 12, than participants enrolled in other out-of-school-time activities.

~ Comprehensive Findings from the 4-H Study of Positive Youth Development



Developing Youth and Communities, continued

20 Leelanau County



4-H teenagers
have been

awarded

\$2,000



Scholarships



to MSU in the
last 8 years

Community Service and Outreach are at the Heart of 4-H

Through its famous pledge of “my hands to larger service,” 4-H has historically given back to the community by encouraging members to volunteer. Leelanau County 4-H’ers participate in numerous relevant service projects each year. The Frontier Quest 300 4-H Club was just one of many 4-H groups to make a commitment to serving our community. Club members organized several successful fundraisers and raised over \$1,500 to replace the lighting in the barn at Reining Liberty ranch, as well as send a donation to help support the veterans who ride there. It was truly an enriching experience for all and a wonderful example of the 4-H pledge!

Partnerships with Local Organizations and Regional Events:

Leelanau 4-H had a presence at the MSU Extension/ Leland Public School farm market, which celebrated its tenth year of providing the finest in regional arts and agriculture. Another such event was the first-ever farm market hosted by Suttons Bay Public Schools that enabled students and community members to sample and purchase a variety of locally-grown fruits, vegetables, and other products. The MSUE “smoothie bike” even allowed students to convert their own pedal power into a delicious and nutritious beverage.



4-H’ers Enjoy Our Great Outdoors!

Leelanau County 4-H’ers and volunteers kept busy exploring, learning, and playing at the 4-H Johnson Preserve north of Suttons Bay. Several events were held at the property, allowing youth and adults to learn about natural resources and enjoy some quality time outdoors. Leelanau County 4-H partnered with the Leelanau Conservation District to help eradicate invasive plants like autumn olive at the Preserve, which created an ideal outreach opportunity for our youth.

During Winter Fun Day, held in February, participants enjoyed a snowshoe scavenger hunt on the property, and trekked down to the creek, where they took part in a citizen scientist study called an IceWatch. Youth were most excited to head back to the campfire to make “hobo” sandwiches and build a snow shelter. In the spring, almost 30 “Greenagers”, from Traverse City West Middle School, came to the property to take part in environmental service stations for a day, and a 4-H teen leader helped lead a group of almost 40 Leland Middle School students in learning about invasive species. Many of these youth had never been to the Preserve before, and their excitement showed as they spent a morning planting seedlings and wildflowers, watering, removing invasive species, and exploring the

Leland 8th Grade at
the Johnson Preserve



Developing Youth and Communities, continued

property. Additionally, the 4-H Outdoor Club held meetings at the Johnson Preserve working with their leader, a forester by trade, to support a management plan for the property. The 4-H youth worked to determine where to plant trees and shrubs, and ways to improve habitat for wildlife. Leelanau County is fortunate to have so many caring people involved in the stewardship of this wonderful property!

Youth “Journeyed to Success” at This Year’s 4-H Exploration Days:

52 youth participants and 13 adult volunteers from Leelanau County enjoyed countless amazing activities and educational sessions during the annual three-day “4-H Exploration Days” event on the MSU campus in East Lansing. This year’s theme was “Journey to Success.” From crafts and Quidditch, to science and agriculture, over 200 sessions were offered that suited everyone’s interests, including the new digital badges youth could earn as they took part in activities throughout the event. During free time, Leelanau County youth and adults were treated to special “behind-the-scenes” tours, on-campus entertainment, and recreational activities like swimming and ice-skating. 4-H Exploration Days is always a highlight on the calendar – a valuable opportunity for young people to sample a major university and have a life-changing 4-H experience.

Leelanau County 4-H: “Goin’ to the Fair”... And Finding Success!

The Northwest Michigan 4-H Livestock Council held its 45th Annual 4-H Livestock Auction on August 11, 2016 during the Northwestern Michigan Fair.



- 463 local 4-H youth (ages 9-18) participated in the auction for 2016



- 1,150 local 4-H youth registered and participated in the 4-H Livestock Council program in 2016



- 35 Swine, 3 Steers donated to local food pantries/charities



- Gross sales from the auction totaled \$724,213.12

Leelanau County 4-H
Youth and Volunteers
Preparing for Fair



KEEPING PEOPLE HEALTHY

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

Improving Nutrition and Physical Activity

The Supplemental Nutrition Assistance Program – Education (SNAP-Ed) provides nutrition education to income-eligible adults and children. This program focuses on improving dietary quality and increasing physical activity while stretching food dollars. The ultimate goal of these programs is to promote healthy weight maintenance and obesity prevention. In 2016, 841 adults and youth were reached through nutrition education classes at various venues in Leelanau County.

- 89 youth were enrolled in Show Me Nutrition (SMN), a six-week program for youth from Pre-K through eighth grade. Participants will have the opportunity to engage in age appropriate, interactive, hands-on activities that promote good eating habits, positive body image, physical activity, and food safety. Through each interesting and fun nutrition class, students will gain the skills necessary to make healthy lifestyle choices. SMN is taught at schools where at least 50 percent of students are eligible for the National School Lunch Program.
- 26 youth received a presentation on 10 Tips: Choose My Plate. MyPlate offers ideas and tips to help create healthier eating styles that meet individual needs and improves health.
- 43 adults participated in nutrition presentations in a variety of settings throughout the county including farmers markets and health fairs.
- 683 people were reached through community health fairs and events where they received nutrition education materials, observed food demos, and sampled healthy recipes.



841 Adults & Youth Reached



Thousands of Newsletters Distributed

Impacts with Youth:

- 94% of teachers reported that children increased their awareness of the importance of good nutrition.
- 69% reported that children were making healthier snack choices.

Impacts with Adults:

- 100% improvement in one or more nutrition practices like planning meals, making healthy food choices or reading food labels.
- 95% of participants in Project FRESH will eat more fresh fruits and vegetables per day.

Nutrition Instructor, Jane Rapin, gives out recipe samples at Leelanau Christian Neighbors food pantry facility in Lake Leelanau.



Keeping People Healthy, continued

One of the adult classes MSU Extension staff teach each year is called **Project FRESH**. In collaboration with the Leelanau County Health Department, MSU Extension Program Instructors provide nutrition education to families involved in the Women, Infants and Children program (WIC) on the benefits of including more fruits and vegetables in their diet. Coupons were provided to these participants to purchase locally grown fresh fruit and vegetables from Leelanau County farmers markets through Project FRESH. Local farmers then redeem coupons for payment of local produce. In 2016, 85 books were distributed valued at \$1,700. The redemption rate of coupons was 51%.

Taking an active role in preventing and managing chronic health conditions

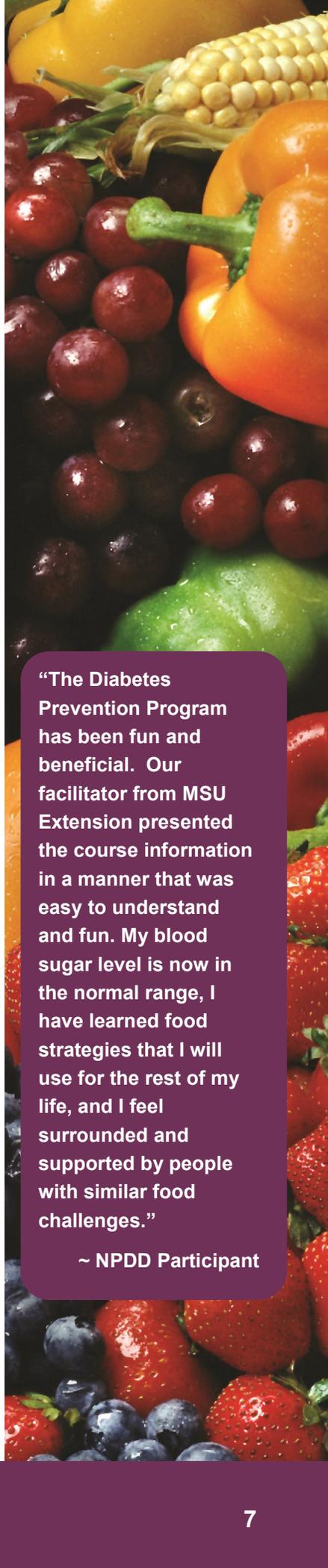
Chronic diseases are among the most prevalent, costly, and preventable of all health issues. Compared to the national average, Michigan adults suffer from more risk factors (obesity, hypertension, and high cholesterol) that contribute to chronic disease. Chronic diseases such as diabetes increase the financial burden on the healthcare system. Diabetes is a chronic disease of critical concern. Support of MSU Extension benefits participants and the community by moderating the increase in healthcare costs associated with caring for a growing population of people with diabetes and other chronic conditions.

Delivery of evidence-based community programming

MSU Extension's **Disease Prevention and Management** programs work to promote health and wellness by reducing and managing the incidence and impacts of chronic diseases among Michigan residents and communities. These community-based, evidence-based core programs provide participants with proven strategies for improved dietary quality, management of chronic health conditions and prevention of chronic diseases.

Dining with Diabetes is a fun and interactive course series targeting individuals with prediabetes, type 1 or type 2 diabetes, members of their support system and/or anyone interested in learning more. Participants learn to make healthy food choices and incorporate balanced menus into the family dining experience. Classes include research-based education, cooking demonstrations and healthy recipe tasting.

National Diabetes Prevention Program (NDPP) is designed to bring to communities' evidence-based lifestyle change programs for preventing type 2 diabetes. The NDPP shows that making modest behavior changes, such as improving food choices and increasing physical activity to at least 150 minutes per week, results in participants losing 5% to 7% of their body weight. These lifestyle changes reduced the risk of developing type 2 diabetes by 58% in people at high risk for diabetes. MSU Extension



“The Diabetes Prevention Program has been fun and beneficial. Our facilitator from MSU Extension presented the course information in a manner that was easy to understand and fun. My blood sugar level is now in the normal range, I have learned food strategies that I will use for the rest of my life, and I feel surrounded and supported by people with similar food challenges.”

~ NPDD Participant

Keeping People Healthy, continued

has achieved full program recognition from the Centers for Disease Control and Prevention and is one of two “fully recognized” program providers in the northwest Michigan region.

Personal Action Toward Health (PATH) is a self-management workshop aimed at empowering people to take an active role in managing diabetes. Over the course of 6 weeks, participants learn strategies to help them deal with difficult emotions, how to develop a healthy eating and exercise plan, goal setting and problem solving, and a variety of other tools to manage diabetes. MSU Extension relies on a longstanding partnership with the Northwest Michigan Area Agency on Aging to deliver this self-management series.

A Matter of Balance is designed to reduce the fear of falling and increase activity levels among older adults. A Matter of Balance includes eight two-hour sessions for a small group led by a MSU Educator and coordinated in with the Northwest Michigan Area Agency on Aging. This nationally recognized program was developed at Boston University.

MSU Extension can support improved health of individuals and communities through delivery of evidence-based programs and engaging in multi-level partnerships with shared goals of reducing the prevalence of chronic disease.

Working collaboratively to promote a culture of health

Local MSU Extension Health & Nutrition professionals engage with community partners to promote shared goals and reduce the prevalence of obesity and chronic disease. MSU Extension staff holds active membership on the Northern Michigan Diabetes Initiative and the Shape Up North collaborative. Both Networks cover several counties within the northwest Michigan region and are aimed at supporting health and preventing chronic disease.

Summer outreach with youth

MSU Extension serves as one of six FoodCorps service sites in Michigan. FoodCorps is a national organization working to connect kids to healthy food in school, so they can lead healthier lives and reach their full potential. Through this program, MSU Extension provides leadership and support to a FoodCorps service member based in northwest Michigan. Service members support Farm to School strategies through delivery of hands-on nutrition and food systems education in classrooms, support healthy school meal, and work with the whole

Julia Paige, MSU Extension FoodCorps service member and Suttons Bay alum, partners with Suttons Bay Summer Kids Club.

“My blood sugar level is now in the normal range.”

“I have learned food strategies that I will use for the rest of my life.”

“My cholesterol has dropped 10 points.”

~ Diabetes Prevention Program Participants



Keeping People Healthy, continued

school community to support a schoolwide culture of health. Julia Paige, a 2011 Suttons Bay graduate, has been serving with MSU Extension since September 2016. Julia has partnered with the Suttons Bay Summer Kids Club to provide hands on food system education to approximately 30 Leelanau County youth throughout the months of June and July. Learn more about Julia and her Suttons Bay roots here:

http://msue.anr.msu.edu/news/giving_back_to_a_community_garden.

Reducing Anger, Bullying, and Stress

Stress Less with Mindfulness

Provided in collaboration with West Virginia University Extension, Stress Less with Mindfulness introduces participants to the experience and practice of mindfulness to reduce stress. Mindfulness can be defined as paying attention in a particular way: on purpose, in the present moment, and non-judgmentally.

Research has shown that practicing mindfulness is effective in reducing stress related symptoms such as worry, depression, and physical tension, and may be helpful in managing chronic conditions such as cardiac disease and diabetes. The MSU Extension program is offered as a five-part series or as a one-time workshop. Two program evaluation surveys collect different outcomes for series and one-time events.

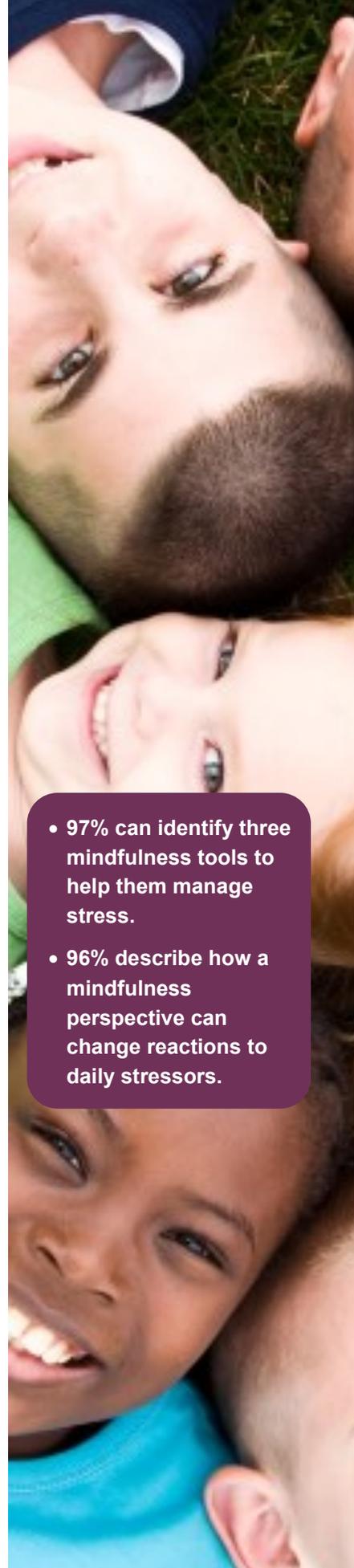
RELAX: Alternatives to Anger

RELAX is a four-part educational series designed to help adults, parents, teens, and caregivers increase their knowledge about anger issues and put anger management and healthy relationship skills into practice. Through discussion and skill-building activities, participants explore what anger is and what triggers it. This interactive program teaches participants techniques for calming down and de-stressing, the principles of problem solving, effective communication skills, and ways to forgive and let go of the past. It is offered as a series, and also as a one-time workshop, including a Train the Trainer version and *RELAX: For Parents and Caregivers*. RELAX is available as an online course.

During 2016, more than half of program participants left with improved knowledge or new skills designed to promote social and emotional well-being with others in their lives and immediate social environments.

- 63% now work hard to be calm and talk things through until they reach a solution.
- 93% increased knowledge on the developmental stages of self-control in children.
- 94% learned new activities to assist children with self-control.

- 97% can identify three mindfulness tools to help them manage stress.
- 96% describe how a mindfulness perspective can change reactions to daily stressors.



SUPPORTING AGRICULTURE & AGRIBUSINESS

Cherries

Integrated Pest Management Update Seminars – District 3 Fruit Educator, Emily Pochubay, coordinated and hosted a total of 42 seminars in northwest Michigan from May – July 2016. Over the course of this program, a total of 584 repeating participants comprised primarily of NW MI fruit growers and local crop consultants attended these seminars. A post-program survey polled 72 participants who represented approximately 1,757 acres of apples and 7,065 acres of cherries in northwest MI. Participants were asked how valuable IPM Updates were for helping them manage production risks.

Grower SWD Trap-Swap and Training Sessions – The invasive pest, spotted wing drosophila (SWD), has become a significant threat to Michigan’s fruit industry and is the cherry industry’s top priority. To help cherry growers combat the threat of SWD, Extension Educators Emily Pochubay and Nikki Rothwell worked with the Michigan Cherry Committee to secure funding from an MDARD Specialty Crop Block Grant to offer growers an SWD trap-swap program that aims to facilitate on-farm SWD monitoring and detection to reduce the likelihood of economic and crop losses caused by SWD. This program also offered SWD identification, monitoring, and management training sessions.



When you support MSU Extension, you help participants learn profitable and efficient business and production practices.

Wine Grapes

Ongoing programming in support of the wine grape industry included educational meetings for growers, reports on growing conditions and pest problems, and data collection from wine grape variety test plots.

In February of 2016 a one-day Vineyard Establishment Conference was held at the Northwest Michigan Horticultural Research Center. Presenters from Michigan and three other states provided information on all aspects of vineyard development, from site selection on through to caring for young vines.

A series of meetings, starting with the annual Wine Grape Kick-Off meeting in April of 2016, and followed by monthly “First Friday” sessions in May through August, featured topics related to efficient and environmentally safe pesticide application methodologies. The Northwest Michigan Orchard & Vineyard Show in January 2017 attracted over 70 local grape growers and winemakers to hear the latest news on crop insurance, viral diseases of grapevines, spotted wing drosophila infestations, and harvest-time insect problems.

2016 marked the last year for data collection from the wine grape variety trial at the Northwest Michigan Horticultural Research Center. Several planning sessions were held to gather input of area growers and winemakers on what projects should be

Supporting Food and Agriculture, continued

conducted next in the research vineyard. The old vines are scheduled to be removed in early 2017 to make space for a new planting which will be used for studies on vine cold-hardiness and sustainable production practices.

Wine Grape Virus Disease Survey Efforts: In October of 2016 Duke Elsner and Dr. Annemiek Schilder, a plant pathologist from Michigan State University, collected 64 samples of wine grape leaves from commercial vineyards in Leelanau County. Samples were screen for dozens of possible grape viruses and other diseases. The results of this survey and recommendations for virus management will be available to growers in 2017.

Hops Production

MSU Extension provides valuable hops education throughout the state of Michigan. Northwest Michigan's Grand Traverse, Leelanau, and Benzie Counties collectively boast more acres of hops than anywhere else in the state.

The reemergence of commercial hop production began in 2009 with a 1.5 acre yard on Old Mission peninsula. Since then hops have been planted in many counties across Michigan though the majority of Michigan's acreage is in northwest Michigan. Northwest Michigan producers have invested tens of millions of dollars in hopyards, harvest, and processing infrastructure over the last several years. Leelanau County is home to at least six hop harvesters and multiple processing facilities, more than any other county in Michigan.

In 2016, MSU Extension held its 9th annual summer hop tour. Sixty-five participants had the opportunity to visit multiple hop yards throughout Northwest Michigan. Of particular interest to many attendees was a delicious lunch and educational tasting at Stormcloud Brewing Company in Frankfort, MI. Head brewer, Brian Confer, described the brewing process, particular hop varieties of interest, and his thoughts on local production of craft beer raw materials. The annual tour is sponsored by the Michigan Brewers Guild (MBG).

MSU also held a statewide Great Lakes Hop & Barley Conference in March 2017 in Detroit, MI. The conference attracted over 300 participants from multiple states and countries. MSU Extension has taken a leadership role across the North Central and North East regions by providing valuable research and outreach to current and prospective growers on best practices for planting, harvesting and pest management. In 2016, MSU Extension hosted members of the Hop Quality Group (HQG), a national organization dedicated to improving hop quality for the craft beer industry. Over two days, the HQG toured multiple hop harvest and processing facilities, the majority of which are located in Leelanau County, offering recommendations to improve food safety

Derek Stepanski (Bell's Brewery) and Alec Mull (Founders Brewing), members of the Hop Quality Group, visit with Leelanau County hop farmers to improve food safety and hop quality.



Dr. Rob Serrine (MSU) and MBG Director Scott Graham address participants at Empire Hops Farm in Leelanau County.





Supporting Food and Agriculture, continued

and overall hop quality. The HQG was extremely impressed with the quality control measures and food safety protocols that growers had in place. As a result of leadership provided by MSU, Michigan is ranked 4th in the United States for hop acreage, and 15th in the world.

Agricultural Tax Management

MSU Extension serves Leelanau County by working with individual farms to provide agricultural tax management education. This allows farms to gain a better understanding to the decisions that they make have on a variety of tax issues.

Farm Analysis

Farm Management Agent Adam Kantrovich works with individual farms performing farm financial analysis. Through the analysis process, accrual-adjusted financial statements are developed making adjustments for inventories, supplies, cash liabilities, and accounts, allowing farmers to understand how the farming business did during the year. This assists farm owners/operators in making sound management decisions based from real financial information.

Farm Succession

Providing farms assistance in the area of Farm Succession and Estate Planning is another way MSU Extension serves Northwest Michigan. This planning may include, but is not limited to, farm succession planning, financial analysis, and tax challenges to prepare a farm to hand over the business to the next generation or to prepare for retirement. Farms develop a plan and gather detailed information to prepare to work with an attorney to develop the formal legal documents necessary for estate planning and farm succession.

Agricultural Labor and Affordable Care Act for Employers

Adam Kantrovich has worked with farms in the educational programming areas of labor and H2A labor taxation. Attendees have participated in regional labor group programs and work with Kantrovich through various modes of communication to gain further knowledge working through labor related challenges.

Saskatoon Berries

MSU Extension and campus specialists continued to work with this relatively new crop to Michigan, providing pesticide recommendations, collecting data from a pruning demonstration plot, conducting a summer field day for growers, and studying important insect pests of this fruit. An MSU GREEN (Generating Research and Extension to meet Economic and Environmental Needs) grant was awarded for the establishment of variety trials and plots for pesticide trials at the Northwest Michigan Horticultural Research Center.

Supporting Food and Agriculture, continued

Other Small Fruits

In 2016 crops such as blueberries, raspberries, and strawberries suffered significant losses from spotted wing drosophila. A half-day session on the recognition and management of this insect in small fruit crops was added to the 2017 Northwest Michigan Orchard & Vineyard Show.

Native Pollinator & Monarch Butterfly Conservation

Starting in early 2017, Duke Elsner officially took on a new role with MSU Extension, conducting educational programming on the conservation of native pollinating insects and the monarch butterfly for all of northern Michigan. Increased efforts in this topic area began in 2016 through speaking engagements, extension articles, and joining a Michigan Department of Natural Resources committee which planned and facilitated a “Monarch Summit” in September. The goal of this committee is to formulate a state-wide plan for monarch conservation efforts, including goals for habitat expansion and increased butterfly populations.

Home Horticulture

MSU Extension Consumer Horticulture Program Instructor continues to serve county residents with educational programming, garden and landscape diagnostic services and horticultural projects. Through volunteer outreach, Extension Master Gardeners share science-based gardening knowledge and engages citizens and empowers communities in environmentally responsible gardening practices, improving food security, improving community, and developing youth through gardening.

The bulk of the hours were in projects benefiting the community like environmental stewardship, youth gardening, Leelanau Governmental Center gardens, community beautification and food, security and hunger support. There are 12 designated Master Gardener projects and four school yard gardens maintained by the volunteers.

One successful and impactful project was the maintenance and use of the Governmental Center native plant gardens. The gardens represent a collection of local plants that are indigenous to the area. A small group of dedicated volunteers come to the garden weekly and maintain it so it looks attractive and well kept. The garden has now become a wonderful opportunity to educate residents and the community. The native plant garden has signage that share with residents the name of the plant and information about the conditions needed to grow that plant best. In addition, classes have been held in the gardens in collaboration with the conservation district to teach individuals about the native plants and how to propagate them in their own gardens. The gardens have evolved into a teaching tool for the community and a resource for residents.

“The gardens at the Leelanau County Government Center are planted with species native to Michigan. It is our hope that their variety of distinct shapes, sizes and colors will encourage those who enjoy them to use them in their residential and commercial landscaping.”
~ Tom Patton, Master Gardener Volunteer



This past year,
Master Gardeners
have volunteered over
 **1,380 hours**
on various projects in
Leelanau County
valued at **\$31,837.**

FOSTERING STRONG COMMUNITIES

When you support MSU Extension, participants learn how to implement best practices in good governance that keeps communities solvent, productive and engaged, learn effective conflict management skills that help leaders and residents work collaboratively on complex issues, and engage youth leaders in decision-making. In the personal finance area, MSU Extension helps youth and adults alike learn the skills they need to increase their savings, manage their spending, avoid predatory lending, and reduce mortgage defaults. All of these outcomes help lower the cost of governmental services and lead to personal and community stability, strong neighborhoods, and safe communities.

The MSU Product Center Food-Ag-Bio assists county residents in developing products and businesses in the areas of food, agriculture, natural resources, and the bio economy. Extension Educators are specially trained as innovation counselors to deliver these services to local residents. Business counseling is conducted on a one-on-one basis and may take place at the MSUE office or the client's home or business location. The assistance provided is tailored to meet the needs of the client and may include things like developing a business plan, navigating the regulatory maze, accessing the supply chain or seeking funding options. The innovation counselor also assists clients in accessing specialized services they may need that are offered through Michigan State University like feasibility studies, nutritional labeling, food science, and packaging assistance.

2015-16 MSU Product Center Impacts in Leelanau County:



55 Counseling Sessions



2 Ventures Launched



3 Jobs Created



Increased Annual Sales: \$15,000



Value of Increased Investment: \$711,000

The Northern Michigan Counties Association is organized by MSU Extension and incorporates commissioners from 34 counties in northern lower Michigan. The Association meets 8 times per year to share information and learn from the experiences of others.

Building Strong Sovereign Nations is a leadership building program developed by MSU Extension in cooperation with leaders of Tribal Nations in Michigan and delivered annually in conjunction with the fall meeting of the United Tribes of Michigan. The program is open to leaders from all Tribal Nations in Michigan and is also available to leadership and staff of individual tribes. Onsite workshops are also available.



Fostering Strong Communities, continued

New County Commissioner Workshops were held at 7 locations in November and December of 2016. Participants included both new and experienced commissioners and other county officials, with 92% indicating that they found the program valuable for their professional (or personal) growth and development.

Registers of Deeds who are members of the United County Officers Association learned about **Intergovernmental Cooperation** at their annual meeting in May.

MSU Extension Educators were also involved in the following **Government & Public Policy** related efforts in and around Leelanau County this year:

- Strategic Planning
- Form Based Code Training with Networks Northwest
- Right to Farm Act Training
- Sign Training with Networks Northwest
- Medical Marijuana Training
- Zoning Administrator Certificate Training
- Professional development and planning education programs with County Planners

Michigan Sea Grant Extension helps apply research, conducts educational activities, and is connected to more than 40 coastal counties. Extension Educators provide technology transfer by interpreting scientific knowledge for decision-makers, public officials, community leaders, businesses, and industries.

Michigan Sea Grant Extension provides targeted support focusing on marinas and other businesses, restoring coastal habitats and related industries, such as commercial and recreational fishing. In partnership with state and federal agencies, Extension Educators are responsive and proactive in addressing local, regional, and national issues relevant to Michigan, with outreach topics and programs such as:

- Economic Impact of Charter Fishing
- Vibrant Waterfront Communities
- Restoring Fish Habitat
- Michigan Clean Marina Program
- Coastal Hazards – Dangerous Currents

Sea Grant Educators are working with Fishtown Preservation Society on the Great Lakes Fisheries Heritage Trail, Leland Township and the Sleeping Bear Dunes National Lakeshore on water safety for swimmers and small boat users, Inland Seas Education Association on great lakes education and stewardship, and various marina and harbor communities on great lakes water level variation, dredging issues, and Clean Marina programs, among other topics.



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