

Grand Traverse County 2018–2019 ANNUAL REPORT

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FROM THE DISTRICT DIRECTOR:

I'm delighted to share the results of another successful year of partnership between Grand Traverse County and Michigan State University (MSU) Extension. Because of your continued support, we've been able to make a difference in the lives of youth, families, businesses and communities.



MSU Extension offers a broad range of research-based educational services to county residents. Over this past year, we've empowered families and individuals to live healthier lives, supported new and local businesses, created opportunities for youth leadership development and career exploration, helped farmers with business management and mental health, and much more. Our staff live and work alongside county residents, are rooted in community relationships and are responsive to community needs.

This year, we've also welcomed Grand Traverse County residents into our online community: we've offered online educational courses, answered questions on topics ranging from gardening to food safety, raised program awareness through social media and provided a library of research-based resources they've browsed on our website.

Our partnership with you makes this all possible. On behalf of the MSU Extension team serving Grand Traverse County, thank you for another great year. We look forward to your continued support and hope you'll be able to join us during one of our upcoming programs.

Jennifer Berkey

Jennifer Berkey
District 3 Director

MEASURING IMPACT:

CONNECTING WITH RESIDENTS

4-H: Developing Youth & Communities	2,107
Keeping People Healthy	4,424
Supporting Agriculture & Agribusiness	1,185
Fostering Strong Communities & Businesses, and Enhancing Our Natural Assets	388
TOTAL PARTICIPANTS IN GRAND TRAVERSE	8,104

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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). Extension programs help children develop early literacy skills that support school readiness. They learn leadership and decision-making skills in 4-H that increase their likelihood of becoming civically active.



Growth in 1st Generation 4-Her's!

- This year our focus has been to increase the number of 1st generation youth who participate in our programs. We offered three new programs over the course of the year that introduced 100 new youth to 4-H. Clubs offered included four Introduction to Babysitting 4-H clubs and two science learning clubs. Through these efforts, we worked with youth at Mill Creek, Willow Hill, East and West Middle schools and a local homeschool group. Programming in science included chemistry, engineering, garden science and the babysitting club's focus was child development, safety and marketing their business.
- We offered a very popular "Cloverbud Fun Day" for children ages 5-9 in our community in May. This event is an excellent avenue for us to introduce young children and families to 4-H animal projects with horses, goats and rabbits. A few of our 4-H clubs and members put on this event with more than 15 families visiting.
- Grand Traverse 4-H secured funding to hire an AmeriCorps Service member to provide Science, Technology, Engineering, Arts and Mathematics (STEAM) learning opportunities in our community. The goal is to have this volunteer member serve underserved populations in Grand Traverse County with a goal of growth in STEAM learning to youth ages 5-19. Current programs include science learning with Fife Lake Elementary school and garden science with Cherry Knoll Elementary school for a total of 85 new youth in 4-H.



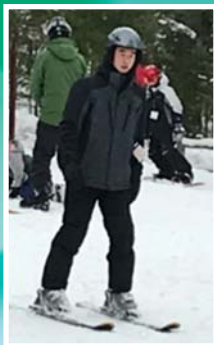
Over 2,000
4-H Participants



4-H youth experience awesome hands-on learning!

- "Show Me the Money" 4-H Retreat was open to teens 11-19 and provided a simulation on money management. Youth had to make decisions on personal wants and needs by visiting different vendors to purchase a home, car, childcare, etc. all while staying within their monthly budget. They had chances to experiment, make decisions and mistakes and deal with the consequences in a realistic but safe environment. Youth





Developing Youth and Communities, continued

said this experience was fun but somewhat difficult. They had more respect for the money management responsibilities their parents had to juggle!

- Over 40 teens and adults from Grand Traverse County attended 4-H Exploration Days at Michigan State University in June to experience college life – making friends, taking classes, living in the dorms and navigating their way around campus. One youth said it gave them “more confidence in being independent and going to college.”
- Cultural exchanges give youth and adults a better perspective on culture – similarities and differences, a gratefulness for their country, family and culture and helps them grow in empathy and seeing different perspectives. In 2018, families in Grand Traverse County 4-H expanded their worldview by hosting international exchange students. Youth from Belize, Japan and Korea visited our area for either a yearlong or a month long learning experience. One family hosted Jumpei from Japan for the year. He was active in soccer and while here, wanted to learn how to downhill ski. We were able to put him into the 4-H Learn to Ski Program and he became very skilled on the slopes!

Animal Science Learning Through 4-H Projects

- The Northwestern Michigan 4-H Livestock Council, Grand Traverse and Leelanau County 4-H held monthly, hands-on learning experiences for youth in species specific topics as well as general education on subjects like youth safety at the fair, animal safety, awesome record bookkeeping and “Finding Your Path” for success. All valuable life skills for their future!
- We also provided two separate opportunities for youth to learn about swine and cattle health, nutrition and digestive systems through hands-on dissection. Cattle youth participating: 44; Swine youth participating: 89. These 4-H youth were able to get hands-on learning as they touched, explored and asked questions about both cattle and swine health and internal digestive systems. It was an awesome experience for many students!

Northwestern Michigan Fair 4-H Auction:



- 360 local 4-H youth (ages 9-18) participated in the auction for 2018.



- Gross sales from the auction totaled \$642,097



- 1,100 local 4-H youth registered and participated in the 4-H Livestock Council program in 2018.



- Animals donated to local food pantries/charities: 18 Swine, 4 lambs, 1 goat. Live weight of animals donated totaled 5,184 pounds.

KEEPING PEOPLE HEALTHY & ENSURING SAFE FOOD

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.

Fostering Health through Nutrition and Physical Activity

Our Challenge

Obesity has important consequences on our nation's health and economy. It is linked to a number of chronic diseases including coronary heart disease, stroke, diabetes, and some cancers. Among adults, the medical costs associated with obesity are estimated at 147 billion dollars. According to The State of Obesity: Better Policies for a Healthier America released in 2017, Michigan has the 10th highest adult obesity rate in the nation. Michigan's adult obesity rate is currently 32.5 percent, up from 22.1 percent in 2000 and from 13.2 percent in 1990.

Healthier Lives through Nutrition Education

MSU Extension supports individual and community level, or public health approaches, to prevent obesity. Through the USDA Supplemental Nutrition Assistance Program Education (SNAP-Ed), we provide exemplary nutrition and physical activity education for limited resource participants where they eat, learn, live, work, play, and shop. Program and outreach efforts aim to increase the likelihood that limited resource youth, adults and seniors can make healthy food choices within a limited budget and choose physically active lifestyles consistent with the Dietary Guidelines for Americans.

One noteworthy example of success has been our continued and growing partnership with Munson Healthcare in coordinating the **Fruit and Vegetable Prescription Program**. The program works closely with local clinics and nonprofits to build systematic support for healthy behavior changes in patients with chronic disease. The program creates stronger partnerships between healthcare providers, patients and their local food sector. Through this program, participants receive vouchers to purchase fruits and vegetables at a local farmers market. MSU Extension Community Nutrition Instructors provide the educational component of the program at the Sara Hardy Farmers Market. We received excellent feedback and positive evaluation results from participants and we are excited to continue this win-win partnership this summer at Sara Hardy, The Commons, and a site in Benzie County.



Fruit and Veggie Prescription Program Participant Results:

- 96% learned new ways to incorporate more fruit and vegetables into meals and snacks
- 94% plan to try a new kind of fruit or vegetable that is in season at the market

"Before coming to the nutrition education classes, I never cooked and would eat out a lot. Now I cook at least 3 nights and eat leftovers the remaining nights. I'm much more confident with my cooking skills and preparing vegetables."

Keeping People Healthy, continued

There have been many other notable successes because of our direct education in the community. Community Nutrition Instructor Michelle Smith uses evidence-based curricula to reinforce healthy eating and physical activity promotion among limited resource youth, adults and seniors throughout Grand Traverse County. One of several partners includes the Traverse Bay Area ISD Life Skills Center – a site that serves students with moderate to severe cognitive or emotional impairments. Michelle brought foundations of healthy eating to life through a hands-on six-week lesson series and shares an experience from one of the classes:



“During one of the classes, our emphasis was on the benefits of eating a healthy breakfast and the class participated in making breakfast burritos. I wanted to have everyone in the class learn how to crack an egg. I used a picture guide of the steps and then demonstrated it with everyone watching at the kitchen counter. Class participants took turns cracking an egg into a bowl with everyone else cheering them on. Not one eggshell made it into that bowl of eggs and this was not a small class. Each participant took his or her time and after very little guidance, each egg was cracked and ready to be whisked. We emphasized that cooking can sometimes get messy and all we need to do is clean up, but no need that day. Adults had a smile on their face and we were all proud. It was great knowing that this was another skill they now have to continue living a life more healthy and independently.”

Making the Healthy Choice Easier - Supporting Changes to Policies, Systems, and Environment (PSE)

MSU Extension works to create a culture of health and wellness by providing coaching at the organization level. We provide technical assistance in assessing the environment, including policies and the physical space, creating an action plan, and implementing the action plan to work towards best practices related to nutrition and physical activity.

The school environment has shown to be a ripe opportunity to make meaningful impact. As the places where children spend much of their time and often eat at least half of their calories, schools are a primary driver in young people’s knowledge of, attitudes about, and access to food.

In partnership with the United Dairy Industry of Michigan, MSU Extension facilitates **Fuel Up to Play 60**. This initiative is an in-school nutrition and physical activity program launched by the National Dairy Council and the NFL, in collaboration with the USDA, to help encourage today’s youth to lead healthier lives. MSU Extension staff engaged students and teachers at Blair and Westwoods Elementary Schools.



This year marked the second year of Blair Elementary School’s participation in Fuel Up to Play 60. By partnering with MSU Extension to help implement this program, Blair has received \$5,514 in grant funding and students have been more apt to brainstorm

**Grant funds to
Grand Traverse County
Schools through
Smarter Lunchrooms
& Fuel Up to Play 60:
\$8,435**

Keeping People Healthy, continued

and lead several new healthy lifestyle initiatives. In Spring 2018, the cafeteria received a makeover which entailed repainting the space to the school colors, bright pictures were affixed to the milk coolers to help encourage students to choose milk, multicolored serving utensils for the salad bar to make choosing fruits and vegetables more fun, as well as a food processor to help make smoothies, dips, and other enjoyable food creations! Student leaders also decided to participate in taste tests and worked with food service to help safely create and serve items for their peers to try. To help encourage students to be more active, this grant assisted the school in adding a gaga ball arena and outdoor volleyball system to the playground.

In Spring 2018, Blair Elementary was also recognized at the State Capitol for their hard work in helping to make their school a healthier place for their students. Blair received a Silver School Wellness Award and attended a ceremony in Lansing. The School Wellness Award recognizes schools who are making significant policy and environmental improvements to their environment related to healthy eating, physical activity, and tobacco-free lifestyles. They were even presented the award by Larry Inman, Representative of the 104th District.

This year was the first year for Westwoods Elementary School to participate in Fuel Up to Play 60. Using student leadership, food service, and adult coaches, the group moved forward with making environmental improvements to the cafeteria with the goal of increasing school meal participation and helping to promote healthy foods such as dairy, whole grains, and fruits and vegetables. Through Fuel Up to Play 60 and with assistance by MSU Extension, Westwoods received \$2,921 in grant funding to help make these changes. New additions to the cafeteria entailed a restaurant inspired painted awning above the serving line, an eye-catching illuminated menu board, a gorgeous dairy cow photo for the milk cooler, new serving equipment on the salad bar, and whimsical window clings to decorate the salad bar. The student team also noticed that their peers were not quite as active during recess and as a result of their observations, various small equipment was purchased to help encourage students to be more active. Now at recess, students have more options for movement, including an outdoor volleyball net, new soccer goals, more tetherballs, footballs, volleyballs, basketballs, and kick balls.

Connecting kids to healthy food in schools – FoodCorps service

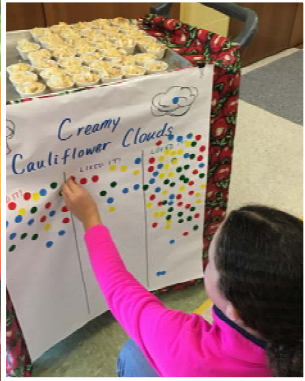
MSU Extension serves as one of six FoodCorps service sites in Michigan. FoodCorps is a national organization working to connect kids to healthy food in school, so they can lead healthier lives and reach their full potential. Service members support Farm to School strategies through delivery of hands-on nutrition and food systems education in classrooms, support healthy school meal, and work with the whole school community to support a school wide culture of health. Throughout the last year, MSU Extension's FoodCorps service member Erin Baumann has served Traverse Heights Elementary School. From September 1, 2018 through early March, Erin has taught over 69 hours of



Blair Elementary School received a Silver Wellness Award for excellence in creating a culture of wellness in their school. L-R: Sam Walter, teacher and School Wellness Team member; Caitlin Lorenc, MSU Extension; Larry Inman, 104th District Representative

Keeping People Healthy, continued

hands-on lessons to 203 students in 10 classrooms and exposed all school students and staff to 6 cafeteria taste tests. In addition, Erin provides key community outreach to support the sustainability of the Traverse Heights greenhouse.



“Providing a service to Traverse City’s most vulnerable population of students is demanding, and this partnership has improved the climate and culture of our building. Nutrition plays a critical role in the proper development of a child’s physical, mental and social growth. We believe the continued partnership between MSU Extension FoodCorps and Traverse Heights plays a vital role in educating the whole child and the whole family.” – Ryan Schrock, Principal Traverse Heights Elementary School

Workplace

Healthy employees are proven to be happier and more productive. MSU Extension health and nutrition staff



work with employers to create a culture of health and wellness within the workplace. Focusing on healthier worksite environments as opposed to only one-time programs is recognized as best practice. Beginning in the spring of 2018, MSU Extension Health & Nutrition Supervising Educator Sarah Eichberger facilitated a healthy worksite process with a small team of dedicated Grand Traverse County employees. Through this process, the County wellness team has made significant improvements in enhancing the health of County systems and environments. In addition, with guidance from MSU Extension, they wrote Grand Traverse County’s first comprehensive wellness policy.

Social Emotional Health

Promoting health and wellbeing includes understanding important connections between physical, mental, social and emotional health. Social and emotional health encompasses forming and maintaining satisfying and healthy relationships, taking another’s perspective, resolving interpersonal conflict, feeling capable and whole, expressing emotions, navigating stress, having supportive relationships, and having a positive sense of self. As is true for all aspects of human development, social and emotional health must be addressed across multiple levels, including the personal, interpersonal, institutional and cultural levels.

Stress Less with Mindfulness

Mindfulness means paying attention to the present moment without judgement. 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. By offering people of all ages alternative ways of relating to life experiences, including thoughts, emotions, physical sensations and events, Stress Less with Mindfulness teaches and encourages the use of mindfulness self-care skills to help one feel better and enjoy life more.

Keeping People Healthy, continued

In 2018, Social Emotional Educator Patty Roth collaborated with the Traverse Bay Area ISD to offer 5 Stress Less with Mindfulness Series. Over 100 students from the Life Skills Center participated in Stress Less classes. The Life Skills Center serves students age 16-26 with moderate to severe cognitive impairments, emotional impairments or autism. The students in this class often work with outside agencies to gain skills that will assist them with independent living.

Simultaneously, 12 teachers from the Life Skills participated in their own Stress Less with Mindfulness classes to practice mindfulness and support and learn new skills to support their own self-care efforts as well as incorporate into their classrooms.

At the conclusion of the school year, a final presentation of Mindfulness was conducted with the TBAISD for 65 students and staff as they set off into their summer. Prior to the sometimes stressful holidays, Patty was invited back to teach a self-care workshop for 52 students and staff to refresh their skills in managing stress through mindfulness.

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 2018, three RELAX series were conducted in Grand Traverse County.

Two classes held weekly March through May were taught to 36 TBAISD Life Skills students and their teachers. A series was also conducted at Long Lake Elementary School and had eight teacher participants. 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.

Weathering the Storm in Agriculture: How to Cultivate a Productive Mindset

Numerous factors may cause stress for farmers. Many farmers face financial problems, price and marketing uncertainty, farm transfer issues, production challenges and more. Farmers and their families may struggle with stress, anxiety, depression, burn out, indecision or suicidal thoughts. This workshop was designed to help participants understand the signs and symptoms of chronic stress and includes resources about how to handle stress for a more productive mindset on the farm.

In 2018, 85 fruit producers learned to:

- Identify stress signs and symptoms.
- Practice three everyday strategies for managing stress
- Find out where to go for additional help and resources
- Make an action plan for managing stress



Mindfulness Training Participant Outcomes:

- 95% are more positive about dealing with stress in their lives by using mindful tools
- 99% now use mindful breathing to calm themselves in the face of stress

As a result of the RELAX program:

- 92% now work hard to be calm and talk things through
- 81% can now identify their anger triggers

SUPPORTING AGRICULTURE & AGRIBUSINESS



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

The 2018 O&V Show reduced risk and improved efficiency in vineyards and wineries with approximate annual total crop values of **\$2.4M** and wine values of **\$18M**.

Supporting Fruit Production

The 2018 Northwest Michigan Orchard and Vineyard Show attracted 305 participants over the course of the two-day educational program held at the Grand Traverse Resort in Acme, Michigan. This meeting was a collaborative effort among the Grand Traverse Fruit Growers' Council, Parallel 45, the Cherry Marketing Institute, and MSU Extension and AgBioResearch. The 2018 show provided producers with the latest in fruit-related research and extension including research updates for tart cherries, sweet cherries, apples, wine grapes, and berry crops that addressed production and marketing. Topics included spotted wing drosophila (SWD) monitoring and management strategies, opportunities for fresh market sweet cherries, trends on cherry imports, worker protection standards, farm transition, labor, fire blight, plant growth regulators, pollination, and emerging pests. The show was a great success and attendees provided many positive comments and feedback. Each year the show is supported by many local, statewide, and national sponsors. This program was coordinated and hosted by Emily Pochubay, Nikki Rothwell, Erwin "Duke" Elsner, and Thomas Todaro. These educators also provided presentations in their respective areas of expertise.

Wine Grapes

Over 120 grape and wine producers, both locally and across the state, attended the Orchard and Vineyard Show to hear the most recent information from a mix of in- and out-of-state researchers on techniques to improve wine quality, expand vineyards with new cultivars, disease management considerations, improve fruit quality and reduce insect damage, and guidance towards sustainable practices.

Of these wine grape attendees, 105 filled out assessments and represented approximately 1,300-1,500 acres of *Vitis vinifera* grapes which has an estimated annual crop value of \$5 million, and wine value of \$37 million in the Northwest region. A post-event survey revealed 80% of attendees have used the information to manage insects, 82% improved yield, 73% minimized crop damage, and 85% used the information to make post-harvest management decisions, i.e., fermentation and enological decisions.

Tree Fruits

Tree fruit integrated pest management works toward optimizing economic and environmental sustainability for orchard growers. The seminar series, "2018 IPM Updates," was coordinated and hosted by MSU Extension educator, Emily Pochubay, and provided tree fruit producers and crop consultants in northwestern lower Michigan with timely pest and disease information related to fruit production during the 2018 growing season. Eight of the 32 seminars held during the 2018 growing season

Supporting Food and Agriculture, continued

were held in Grand Traverse county. Each seminar was a two-hour session in which educational information such as factsheets, articles, presentations, and quizzes were presented by Emily Pochubay and invited speakers. Over the course of this program, Pochubay hosted 454 participants comprised primarily of NW MI fruit growers and local crop consultants. A post-series survey polled 48 participants who represented approximately 1,576 acres of apples and 7,413 acres of cherries in NW MI. All participants reported that attending IPM Updates improved their knowledge of practices that helped them to reduce production risks.

Saskatoon Berries

Duke Elsner continued to work on the establishment of a planting of “Novel Berries” at the Northwest Michigan Horticultural Research Center in 2018. This project now includes six varieties of Saskatoon berries, nine varieties of haskaps, four varieties of goji berries, and two varieties of aronia berries. Pesticide recommendations for Michigan Saskatoon growers were updated for the annual edition of the Michigan Fruit Management Guide, Extension Bulletin E154.

Native Pollinator & Monarch Butterfly Conservation

Duke Elsner provided educational programming on native bees, butterflies and other insects several times during 2018. Audiences included garden clubs, conservation organizations, and elementary schools. A Pollinator Health meeting was held in April, bringing together representatives from public and private organizations, agriculture and the general public to discuss pollination-related issues in the Grand Traverse region. Duke also wrote a “Pollinator Outlook” for the Grand Traverse Business Journal annual outlook that was published by the Record Eagle in November.

Home Horticulture

2018 was another landmark year for the Consumer Horticulture Program in Grand Traverse County. Through volunteer outreach, Extension Master Gardeners shared science-based gardening knowledge, engaged citizens and empowered communities in environmentally responsible gardening practices, improving food security, improving community, and developing youth through gardening.

This past year, Master Gardeners volunteered for more than 3,500 hours on various projects in Grand Traverse County valued at over \$86,000. The bulk of these hours were spent on projects benefiting the community like environmental stewardship, therapy gardens, community beautification, youth gardening, and growing food for donation to local food banks. The remaining hours were spent sustaining the program with volunteer management and recruitment and/or supporting MSU Extension in its mission to bring the University’s resources closer to our local residents.



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Supporting Food and Agriculture, continued

Grand Traverse Plant & Pest Diagnostic Services

Although county residents are always welcome to call or visit the office for assistance with horticultural issues, the office held plant health diagnostic clinics every Wednesday, June through September of 2018. Residents were welcomed to bring in samples of plants, insects, diseases and other problems. MSU Extension staff, county employees and Master Gardener volunteers provided the expertise to diagnose problems and provide management recommendations. In 2018, over 250 Grand Traverse County residents had their plant or household pest problems addressed during our free clinics.

Other Consumer Horticulture programming and services available for residents of Grand Traverse County include:

- Gardening Hotline
- Gardening in Michigan website
- Ask an Expert online system
- Smart Gardening programming
- Soil tests for home gardens, yards and landscape plants



"The brewing landscape is shifting, yet small and independent breweries continue to find market success. Brewers are finding ways to differentiate themselves in a competitive market, become pillars of communities, and embrace new experiences and occasions to connect with beer lovers."

~ Julia Herz, Craft Beer Program Director of the Brewers Association

Supporting Hop Production

Although the exponential growth in the craft beer sector has tapered off in the last year or two, the number of U.S. breweries surpassed 7,000 in 2018. In the past year, craft beer volume increased by 5% while overall beer volume declined. Michigan is currently ranked 4th in both number of breweries and acres of hops in production. Hops provide aroma, as well as bitterness to offset the sweetness of malt. In spite of a challenging market for some public hop cultivars that are in oversupply nationally, Northwest Michigan's Grand Traverse, Leelanau, and Benzie Counties collectively boast more acres of hops than anywhere else in the state. Northwest Michigan producers have invested tens of millions of dollars in hopyard, harvest, and processing infrastructure over the last several years.

MSU Extension provides valuable education on hop production throughout the state of Michigan and beyond, and 2018 was no exception. MSU Extension Educators, Dr. Rob Sirrine and Erin Lizotte gave many presentations throughout Michigan including The Great Lakes Hop and Barley Conference, Hop Growers of Michigan Field Day, Elk Rapids Garden Club, and multiple presentations as part of the MSU Hop Webinar Series. MSU Extension coordinated tours of MI LOCAL hops and Green Heron Hops in Grand Traverse County, and Empire Hops, Cedar Hop Farm, and Michigan Hop Alliance in Leelanau County for researchers, prospective growers, professors, and the Brewers Association Small Grower Representative. They also hosted the annual Great Lakes Hop Working Group (GLHWG) meeting in Traverse City, MI. The GLHWG is a multi-state collaborative developed and coordinated by MSU that seeks to develop priorities for hop research and education and collectively work to address those needs.



Supporting Food and Agriculture, continued

In 2018, MSU Extension organized on-farm audits with members of the Hop Quality Group, a national non-profit organization dedicated to improving hop quality for the craft beer industry. The Hop Quality Group and MSU Extension toured multiple hop harvest and processing facilities offering recommendations to improve quality.

In March of 2019, MSU held its annual Great Lakes Hop & Barley Conference at the newly renovated Park Place Hotel and Conference Center in Traverse City, MI. The conference features hop, barley, and craft beer experts from around the world, and generally attracts 200+ participants annually from multiple states and countries. At the conference, Mark and Mary White of Green Heron Hops in Grand Traverse County were awarded 3rd place in the annual Chinook Cup, where hops from around Michigan are judged based upon Appearance/Color, Aroma and Brewing Values. MSU collaborated with MI LOCAL Hops of Williamsburg, MI and Great Lakes Malting Company of Traverse City to offer very well attended post-conference educational tours.

MSU Educators continue to secure federal and state funding for on-farm research in Grand Traverse County. Dr. Rob Sirrine and Erin Lizotte are currently primary investigators on a multi-state USDA-funded grant with Washington State University scientists that seeks to Develop and deliver IPM strategies to the rapidly expanding U.S. hop industry.

Assistance to support beginning farmers across MI

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. The innovation counselor has special training to deliver these services to local residents. Business counseling is conducted on a one-on-one basis and may take place at the MSU Extension 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, food processing, nutritional labeling and packaging assistance.

Businesses assisted in Grand Traverse County included food processors, wineries, a café, nursery, and value-added agriculture producers. Seven county businesses participated in the Product Center's Making It In Michigan Trade Show held in Lansing where they showcased their products to retail buyers and made connections that will lead to increased sales in the coming year.



263 Counseling
Sessions



New Sales:
\$2,639,000



30 New Jobs
Created



New Investments:
\$944,000



Members of the
Great Lakes Hop
Working Group tour
MI LOCAL Hops in
Williamsburg, MI.



2017-19 MSU
Product Center
Impacts in Grand
Traverse County



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.

New Commissioner School is a program designed especially for newly elected county commissioners and also attended by experienced commissioners as a refresher. The program is held following commissioner elections in even numbered years, and was well attended by Grand Traverse County Commissioners in 2018.

Northern Michigan Counties Association is a group of county commissioners from about 35 northern lower peninsula counties that meets 8 times each year to learn about topics that are relevant to county government and to share information between the counties. Grand Traverse was represented at several of the 2018 programs.

The Grand Traverse County Board of Commissioners asked MSU Extension to facilitate a discussion with township leaders to talk about changes the county had made in planning functions and future needs for **planning and economic development**.

Two **townships** in Grand Traverse County held a total of 4 workshops with Extension Educators to learn more about **improving their meetings** and working together to govern better.

The MSU Extension **statewide ballot issues** education program held a Traverse City location for a statewide interactive presentation about the 2018 proposals.

A **Real Colors** workshop was offered for Grand Traverse County employees during January's staff in-service day. Real Colors is a dynamic workshop experience providing participants with the skills to better understand their own personalities and build appreciation and acceptance of each unique temperament.

Supporting Food and Agriculture, continued

Enhancing & protecting our Great Lakes coastal resources

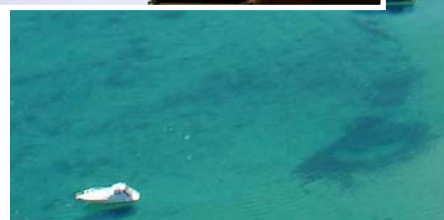
Sea Grant Extension

MSU Extension's Greening Michigan Institute supports efforts to carry out Sea Grant programs throughout Grand Traverse County and the rest of Michigan. 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.

FishPass project at Union Street Dam: FishPass will be the capstone of a 20 year restoration project on the Boardman River, Traverse City, Michigan, re-connecting the Boardman River with Lake Michigan. The mission of FishPass is to provide up- and down-stream passage of desirable fishes while simultaneously blocking and /or removing undesirable fishes. FishPass will replace the deteriorating Union Street Dam in downtown Traverse City, Michigan with an improved barrier featuring a fish-sorting channel and a nature-like river channel. Michigan Sea Grant is an active member of the Education Committee for FishPass, seeking public input into ecosystem education issues with invasive species and general fisheries. In July, 2018, a two-night workshop was held to engage the angling community and identify key issues. In general, the angling community is supportive of FishPass and many clarifying issues were identified and considered. Sea Grant personnel have also provided input into conceptual design signage to engage audiences in the research and outreach activities at the project. The period of 2019-2021 is expected to be a key construction and initial educational programming outreach timeframe.

11th Annual Freshwater Summit: Over 150 people attended the Freshwater Summit. Key topics discussed were Great Lake Level Fluctuations by Dr. Drew Gronewold of the National Oceanic and Atmospheric Administration - Great Lakes Environmental Research Laboratory, and Coastal Riparian Legal Framework by Dr. Dick Norton of the University of Michigan. Sea Grant Educators presented on Coastal Community Tools for Small Harbors.



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