



Benzie 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 Benzie 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 Benzie 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 Benzie 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

District 3 Director

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Patricia Roth

Social Emotional Health Educator

Debra Laws

4-H Program Coordinator

Caitlin Lorenc

Community Nutrition Instructor

Deborah Longo

Secretary



MEASURING IMPACT:

CONNECTING WITH RESIDENTS

4-H: Developing Youth & Communities	408
Keeping People Healthy.....	2,632
Supporting Agriculture & Agribusiness.....	282
Fostering Strong Communities & Businesses, and Enhancing Our Natural Assets	137

TOTAL PARTICIPANTS IN BENZIE 3,459

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.

The Benzie County 4-H Advisory Council

- The 4-H Advisory Council is the overall governing body of the Benzie County 4-H program. This group serves as an advisory board to 4-H staff and assists in advancing the local program's structure, course of direction, and vision for the future.
- The Benzie County 4-H Advisory Council also works with 4-H staff to support a 4-H Ambassador program, county plat book, annual youth trip to Michigan State University, and state-level trainings for teen and adult volunteers at the 4-H Kettunen Center, a conference and retreat facility in Tustin.
- In June of 2018, the group celebrated an historical moment in awarding the first-ever Benzie County 4-H – Gleaners Life Insurance Society Scholarship. The recipient of this \$1,000 award is Claira Putney. The scholarship process involves an application with multiple components and a formal interview.

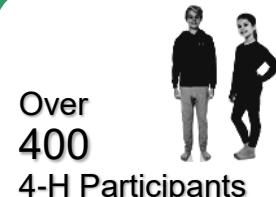
Announcing the First Benzie County 4-H Advisory Council Scholarship Winner

The winner of this first-ever award is Claira Putney, daughter of Brian and Dodie Putney. Claira is a 10-year member of the Benzie County 4-H program and the Betsie River Barnyarders 4-H Club.

A 2018 graduate of Benzie Central High School, Claira is now a student at Northwestern Michigan College, majoring in Business Administration. She is also currently employed at the Market Basket in Beulah.

When asked about her 4-H experiences, Claira reflected, “I was never the outgoing kind of child. Being involved in 4-H while growing up has helped me change that to become the person I am today. The 4-H program pushed me outside of my comfort zone, making me talk to people that I would not usually speak to. For example, the hardest thing for me was going out and letting potential buyers know about my livestock projects and asking them to sign an auction buyers' agreement slip.”

Claira continued, “As I got older, I found these tasks to become increasingly comfortable



Over
400
4-H Participants

“Serving on the Benzie County 4-H Advisory Council is of tremendous value and an honor.” - Lisa Shoemaker-Young

“The 4-H program has taught me skills that many children don't have the opportunity to learn and has prepared me to become a responsible member of my community.”

Developing Youth and Communities, continued

and decided I would go even farther outside of my comfort zone and become a youth member on the 4-H livestock council. When I served on the council, I went further still, by organizing the livestock sweepstakes showmanship event. The 4-H program has taught me skills that many children don't have the opportunity to learn and has prepared me to become a responsible member of my community. When I finish college, I plan to become involved again with 4-H as a livestock council member or 4-H club leader, so that I can help impact the lives of others - just as many 4-H leaders have had an impact on mine. I know that I am young, and plans can change, but one thing I know for certain is that I will be a 4-H supporter for life."

"4-H has taught me to me to be responsible, courteous and helpful. I love to help members who are just starting out and show them how things work. The Companion Animal Interviews event made me a better speaker and more comfortable in talking to adults and answering their questions." – Alberto Lopez

"4-H showmanship and selling my animals at the livestock auction helped me become more confident talking to people. It became easy to talk to them about an animal I knew a great deal about from the experience I had gained in raising it myself. Even more important, I like 4-H because it brings people together." – Dominic Lopez

The Benzie County 4-H Ambassador Program

- A maximum of two Benzie County 4-H members are selected annually to serve as Benzie County 4-H Ambassadors through an application and interview process.
- Youth that are selected serve as representatives of the program at public 4-H events. For the year of their service, they also affiliate with a 4-H council and participate in those meetings and related activities.
- At the end of their term, 4-H Ambassadors complete an exit interview and many unite with the program well after they have graduated from high school and college. Their feedback clearly indicates that this title is a highly favorable asset when mentioned in portfolios and resumes, scholarship and college admission applications, and employment interviews. Furthermore, they add that their council experience helped them gain leadership and decision-making skills that will increase their likelihood of becoming civically active as adults.

The Benzie County 4-H Ambassadors selected for the 2018–'19 year are Alberto and Dominic Lopez. The twin brothers are nine-year members of the program and currently 8th grade homeschooled students.

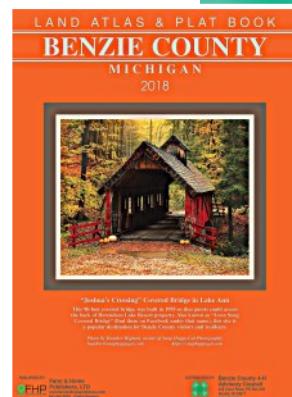


Both Alberto and Dominic started with Benzie County 4-H at the age of 5 in the soccer program and just completed their last soccer year in the fall of 2018 (soccer runs through 8th grade). Alberto eventually became adept at playing any position needed, but was especially skilled as a goal-setting forward. Dominic's teams depended on his defense skills and he served as a goalkeeper. He was "a solid goalie" according to his teammates. In addition to their soccer involvement, both boys exhibit and sell livestock at the Manistee County Fair. Their project areas have included swine, goats, poultry, and rabbits. Both boys are also veteran competitors of the 4-H Companion Animal Interviews event, often winning blue ribbons and even Best of Show distinction.

Developing Youth and Communities, continued

The Benzie County Land Atlas and Plat Book

- Plat books make use of the Public Land Survey System to represent land ownership patterns on a county-by-county basis. They are a convenient reference for local governments, private realty, surveying companies, and the general public. Although the advent of aerial and satellite imagery, GIS, Google Maps and other technology have become useful in this era, they don't replace the legal boundary data featured in plat mapping or plat books.
- The latest Benzie County edition of this book was launched in March of 2018. The cover features a popular local landmark, "Loon Song Covered Bridge" in Lake Ann. This is a 2-year fundraising project and the Benzie book is scheduled for a new release every even-numbered year.
- Proceeds from all sales go directly to the Benzie County 4-H Advisory Council. Most local Benzie 4-H activities, events, and trainings are covered by funds generated from plat book sales.
- 4-H Program Coordinator Debra Laws works with the plat book publisher on the non-plat content, such as the cover, soil and landforms maps, government directory, and 4-H ads. The book's content and accuracy are a serious endeavor. In fact, feedback on this latest edition was received from former Benzie County commissioner Terry Money that indicates that improvements are needed in the manner in which smaller plats are identified. Laws consulted with the advisory council and they have already implemented those changes for the next book, set to be released in early 2020.
- The book is sold at the Benzie County Treasurer's Office and the Benzie MSU Extension office, as well as at several local businesses, including Backcast Fly Shop, Lake Ann Grocery, Nugent Ace Hardware, Stapleton's Market, Tag Limit Outdoors, and Victoria's Floral Design & Gifts. Sales records continue to show that the book is ordered statewide, by residents of both peninsulas, as well as the states surrounding Michigan.



"The Benzie 4-H Soccer program works through community involvement and support. It's great to see the kids come back year after year until they are old enough to referee or coach." – Jeff Louwsma, 4-H Soccer Director

Benzie Youth Soccer Program

The Benzie County 4-H Youth Soccer Program began in 1987, as an answer to the county's need for a well-organized, youth athletic program.

Beulah resident Jeff Louwsma has served as the volunteer director of the program since September of 2016. He also oversees most of the soccer activity at the field at Memorial Park in Benzonia. Ray and Samantha Downs, from Honor, have been with the program since 2010. They supervise the practices and games at the field at Almira Township Park in Lake Ann.




122 Benzie
County Youth



Developing Youth and Communities, continued

4-H Exploration Days at MSU

- This 3-day event, held annually in late June at the Michigan State University campus, simulates the college campus experience for over two thousand 4-H youth from all over the state.
- The youth and their chaperones are housed in the dorms as they attend a variety of classes and other educational events. Subject areas include animal/human/technical sciences, business & entrepreneurship, leadership, environmental education, international culture and languages, performing arts, and personal and business finance.
- The Benzie County 4-H Advisory Council pays 60% of the registration fee for youth attendees, plus additional expenses such as group insurance and chaperone needs.
- For most of these Benzie County youth, this event can be their first exposure to a college campus and can influence them towards a college education and greater career goals than they had originally planned.



Tyler Iverson, winner of Best of Show at the 2018 4-H Youth Live Performance event, with his trumpet solo "My Regards".

Exploration Days and 4-H experiences in general have greatly impacted Tyler Iverson, a member of the Betsie River Barnyarders club and a junior at Benzie Central High School. While at Exploration Days last year, he attended a chamber music class, leading to increased ensemble and musicianship skills. He followed that with a German language and culture class. Later that summer, he won the top prize at the 4-H youth talent competition with his trumpet solo. This year, he will miss Exploration Days, but that's because he has been selected to be a part of a 300-member ensemble of U.S. student musicians traveling to – of all places – Germany! The valuable lessons he learned at Exploration Days will assist him in his role with the Michigan Ambassadors of Music and Voyageurs International group on their multi-country European tour.



Benzie County 4-H Plays Vital Role in 2 Northern Michigan 4-H Livestock Auctions

- The Benzie County 4-H program is unique in that its members have the choice of two 4-H livestock auctions in which to participate. Because Benzie County does not have a fair of its own, 4-H members can go northward to Traverse City, to the auction hosted by the Northwest Michigan 4-H Livestock Council. They can also choose to go southward to Onekama, to the auction supported by the Manistee County 4-H Livestock Council. Both auctions are held in August, at their respective county fairs.
- On August 23, 2018, the 4-H auction at the Manistee fair celebrated its 38th year with

Livestock Auction:



145 Animals



99 Buyers



\$95,000 Raised



Developing Youth and Communities, continued

a sale featuring 145 animals and 23 donated items. With 99 buyers participating, the event raised nearly \$95,000.

- The 46th Northwest Michigan 4-H Auction occurred on August 9, 2018. The sale featured a total of 360 4-H youth from Antrim, Benzie, Grand Traverse, Kalkaska, and Leelanau counties and the event raised over \$642,000. 23 animals were donated to local food pantries.
- In all 4-H auctions, the majority of the money raised goes back to the 4-H members and is used for back-to-school needs and college funds.
- At both auctions, nearly half of the buyers represent businesses local to that county. People want to support businesses that support 4-H. These local businesses report that the exposure and publicity they get by being involved in the 4-H livestock auction increases their foot traffic and volume.



Benzie County 4-H Educational Programming

- In Benzie and Manistee counties, there is a mandatory requirement that selling members participate in organized and content-specific educational programs and events.
- 4-H Program Coordinator Laws has worked with the 4-H Livestock Council to establish an annual day-long educational event that is held every April. The focus of the sessions isn't just about raising and selling animals. It's about gaining skills that can be used later in life, in college or trade school, and on the job. The event has aligned with a 5-year plan that started in 2016, using topics and presenters connected with Michigan 4-H's "Youth Business Guide to Success" program. Team members from Michigan 4-H's Career Education and Workforce Preparation team are among the program's guest presenters every year.
- The 2018 educational event topics included, "Now Where Did I Put That Information," which dealt with record-keeping skills, "Communicating with Potential Buyers Verbally" which instructed our market members on verbal business communication skills, "Thank You Very Much," which covered a variety of written communication skills, and "Hitting the Bullseye," that taught universal customer satisfaction techniques. The event was attended by 68 Benzie and Manistee 4-H participants.
- The 2019 event will feature a program on MSU's Agricultural Technology program, which offers a 2-year degree at many local community colleges and the opportunity to follow a more advanced path to a 4-year degree at MSU.



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.

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.

Schools

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.

Through a partnership with the United Dairy Industry of Michigan, MSU Extension



Nutrition Education Participants: 2,367



Local partnerships are critical to the relationships with Benzie Central and Frankfort-Elberta Area Public Schools.

Benzie Area Christian Neighbors (BACN), Benzie Drop In Center, Grow Benzie, and the Benzie – Leelanau Health Department are some of the many partners that support and host our efforts to reach Benzie individuals and families.

Keeping People Healthy, continued

Fuel Up to Play 60

Value of grant funds
and resources to
Benzie County Schools

\$ 18,712

facilitates the Fuel Up to Play 60 initiative. Fuel Up to Play 60 is a free in-school nutrition and physical activity program launched by National Dairy Council and NFL, in collaboration with the USDA and designed to allow teams of students to make PSE changes that encourage other students, staff members, and administrators to lead healthier, active lives.



The changes within our schools cause a ripple effect of positively impacting our communities as students incorporate their leadership skills to motivate and encourage family and community members to properly fuel their body so they can be active every day. Below you will find a snapshot of the excellent work that has happened as a result of these sustaining partnerships.

Betsie Valley Elementary School



This is the third year of Betsie Valley's participation in Fuel Up to Play 60. By partnering with MSU Extension to help implement this program, Betsie Valley has received \$3,622 in grant funding in 2018 and students have been more apt to brainstorm and lead several new healthy lifestyle initiatives. In Spring 2018, the cafeteria continued to see environmental improvements which entailed adding detailed farm-based photographs above the serving line, milk coolers, and doors. These photos served to brighten the cafeteria space and to encourage students to continue to make healthy food choices. Other modifications included adding fun-colored serving utensils to the salad bar and new serving bowls which help to make the process of choosing foods fun! To help encourage students to be more active, this grant assisted the school in providing more options for movement. Betsie Valley started a Walk/Run Club which is available to students before school and during recess. Fuel Up to Play 60 student leaders have enjoyed encouraging their classmates to be more active, eat healthier foods, and serving as role models for younger students.

In Spring 2018, Betsie Valley Elementary was also recognized at the State Capitol for their hard work in helping to make their school a healthier place for their students.

Betsie Valley 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 Curt VanderWall, former Representative of the 101st District.



Benzie Central Middle School

For their first year participating in Fuel Up to Play 60, Benzie Central Middle School (BCMS) was awarded \$3,980 in grant funding with assistance provided by MSU Extension. This grant money was used to help make environmental improvements to



Keeping People Healthy, continued

the cafeteria space by assisting in making the space imitate a restaurant-like atmosphere with the goal of increasing student participation in school meals. Changes to the space included adding bright colored and detailed photographs which reflect what our local farms produce. A brand new milk barrel cooler was installed to help make choosing milk easier for students. As a final change, the student leadership team hosted three taste tests to help encourage their classmates to try new foods. Taste tests can also have positive impacts on school meal offerings and the team is working with food service to help make menu changes. Another important part of being healthy is physical activity. The Fuel Up to Play 60 grant also helped to purchase a fitness cart and new small fitness equipment for students to have more options to be active before school starts and during lunch recreation time. Fuel Up to Play 60 is helping BCMS students and staff start and continue their journey on living a healthy lifestyle!

Frankfort Elementary School

Fuel Up to Play 60 is thriving at Frankfort Elementary (FES)! By partnering with MSU Extension to help implement this program, FES has received \$4,510 in grant funding in 2018. This student leadership team decided to use funding to help implement a cafeteria food waste audit, starting with breakfast. The grant allowed students to purchase equipment necessary to conduct the audit including a scale, aprons, buckets, and a camera to document their work and progress. Students have conducted a school-wide cafeteria survey and are working closely with food service to make sure foods offered in the cafeteria reflect student food favorites. Alternatively, the leadership team is also helping to educate their peers through nutrition education and posters so other students know what eating healthy means! Through their work, Fuel Up to Play 60 FES student leaders noticed students were not very active at recess. To change this, grant money was used to construct a Gaga Ball Pit, new kickball bases, field paint to outline the soccer field, hula hoops, and more! All of the new equipment has really ramped up recess for these Panthers.

Chocolate Milk for Area Athletes

In 2018, MSU Extension worked closely with Frankfort High School's track team and Benzie Central's Varsity Cross Country and Varsity Track teams to help athletes reach peak performance by staying hydrated with chocolate milk. By partnering with MSU Extension, these schools received a total of \$6,600 in grant funding to purchase chocolate milk for their teams. Provided by the United Dairy Industry of Michigan, the Chocolate Milk: Nature's Sports Drink program encourages athletes to choose chocolate milk after grueling practices and games as it contains nine essential nutrients needed for overall health. MSU Extension also assisted in distributing 1,400 bottles of chocolate milk, valued at \$1,500, at the annual Benzie Central Pete Moss Cross Country Invitational.





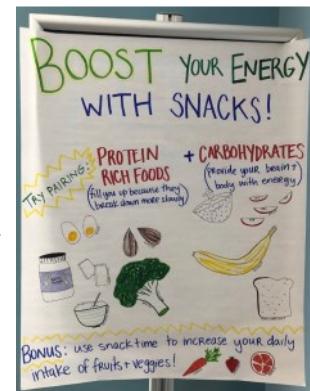
Keeping People Healthy, continued

MSU Extension & FoodCorps in the Local Community

MSU Extension serves as one of seven 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 staff member Sarah Eichberger provides leadership and acquires financial support for a FoodCorps service member. 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. With the academic year concluded, service member Sarah Perez-Sanz completed summer service hours with Benzie Area Christian Neighbors. Sarah provided fun and interactive taste test for adults and children.

In addition to facilitating taste tests, Sarah created four “snack hack” posters to be rotated in the waiting room at BACN. The messages included:

- Boost your energy with snacks: Pair protein rich foods with healthy carbs, and use snack time to increase your daily intake of fruits and veggies,
- Snack mindfully: Drink water, Take a walk, Eat slowly, Don’t multitask
- Try to practice portion control: Snacks shouldn’t replace a meal
- Make healthy snacks an easy choice: You’re more likely to pack a healthy snack if it’s convenient and accessible.



Sarah's time was appreciated by BACN. "I want to thank you for allowing Sarah to finish out her service at BACN. It was wonderful to be able to just give her a couple of ideas and she did the rest! Her posters, recipes and coloring sheets will be a great on-going addition to our waiting room. Her quick smile was infectious and the neighbors enjoyed having the opportunity to try new dips and learn a few tricks and safety tips when cutting up vegetables. While only here a short time, I will definitely miss her." – Michelle, Benzie Area Christian Neighbors

Social Emotional Health

Promoting health and well-being 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.

Keeping People Healthy, continued

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.

In 2018, Social Emotional Educator Patty Roth provided Mindfulness Training programming to residents of Benzie County:

- In collaboration with the SafeNet Prevention Specialist, weekly mindfulness lessons were provided to a group of elementary boys identified by teachers as needing a little extra assistance in managing their emotions. Activities helped the boys identify their own personal stress cues, how to recognize when they were experiencing them, and steps to take to calm themselves before the emotions got “too big”.
- Mindfulness classes were also offered in an after-school program for elementary students. Lessons were similar to the previous classes mentioned and also helped students understand that the feelings they experience are okay, everyone has them, and it's a part of being human. They learned to identify their feelings, being non-judgmental about having them and how to take care of themselves when they do.
- Students in a special education high school class received weekly mindfulness lessons. The students experienced several different mindfulness practices, such as mindful breathing, mindful walking, mindful eating, guided imagery and more. They explored new techniques for managing anxiety and practicing self-compassion. The teacher, who began to recognize his students' stress cues, was able to remind them to use their mindfulness practices or lead the entire class through one when he noticed a high level of anxiety or stress in the room.
- 19th Judicial Circuit Court Youth Services Division partnership continued to grow in 2018. Youth referred through case workers participated in mindfulness lessons as a part of their probation. Adult mentors who volunteer with youth services also received training around setting boundaries with the students they work with.
- Stress Less with Mindfulness presentations were conducted through the Traverse Bay Area Intermediate School District (TBAISD) Life Skills Center (LSC). Over 100 students, many from Benzie County, from the LSC participated in Stress Less classes. The LSC 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.
- At the conclusion of the school year, a presentation of Mindfulness was conducted with the TBAISD for 65 students and staff as they set off into their summer. Prior to

Mindfulness Training Participant Outcomes:

98% can identify three mindfulness tools

95% are more positive about dealing with stress

99% now use mindful breathing

96% practice mindful movement

98% describe how a mindfulness perspective can change reactions to daily stressors.



Keeping People Healthy, continued

the sometimes stressful holidays, the MSU Extension Educator was invited back to teach a self-care workshop for 52 students and staff to refresh their skills in managing stress through mindfulness.

- Teachers who also received the Stress Less with Mindfulness series in the previous year received a mindfulness presentation to review and refresh skills, share progress with implementation into classrooms and provide support to one another.

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, two RELAX series were conducted at Traverse Bay Area Intermediate School District for Life Skills students and their teachers.

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.

As a result of the RELAX program:

- 77% reduced their frequency in yelling and screaming
- 92% now work hard to be calm and talk things through
- 92% now talk things through until they reach a solution
- 81% can now identify their anger triggers

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





SUPPORTING AGRICULTURE & AGRIBUSINESS

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



Supporting Fruit Production

Tree Fruits

Each year, MSU Extension educators, Emily Pochubay and Nikki Rothwell, collaborate with the Benzie-Manistee Horticultural Society to offer innovative educational programs to tree fruit producers in northwest Michigan. In 2018, these groups developed and delivered a daylong workshop, Calibrating Sprayers for Success in Orchard Systems, that was held at the Blaine Christian Church in Arcadia, MI and attracted nearly 60 participants comprised primarily of growers and consultants. This workshop was designed to meet the industry's need for calibration education. MSU Extension educators and researchers provided classroom style presentations at the church and these presentations were followed by a hands-on field demonstration on optimizing orchard sprayers to improve coverage and minimize spray drift. Vendors including Gillison's Variety Fabrication, Louis Gelder and Sons, and Precise Manufacturing were on site for the demonstration and the meeting was sponsored by the Michigan State Horticultural Society.

Integrated Pest Management

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 were held at the Blaine Christian Church (Arcadia, MI) in Benzie County to provide Benzie and Manistee County growers with a convenient meeting location. Each seminar was a two-hour session in which educational information such as fact sheets, 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.

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,

Supporting Food and Agriculture, continued

bringing together representatives from public and private organizations, agriculture and the general public to discuss pollination-related issues in the region.

Home Horticulture

In 2018 we saw another year of growth for the Master Gardener Program in Benzie County. Through volunteer outreach, Extension Master Gardeners shared science-based gardening knowledge and engaged citizens in environmentally responsible gardening practices, improving food security, improving community, and developing youth through gardening. There were 8 certified Master Gardener volunteers active in Benzie County this year working more than 300 hours on various projects in Benzie County valued at over \$7,600. The bulk of the hours were in projects benefiting the community like environmental stewardship, community beautification, and food security.

2018 saw the creation of several new Master Gardener Volunteer Projects in the county. For example, Master Gardeners are working on two garden projects in the village of Elberta. The first is at the village's waterfront park working with groups of youth in a new youth exercise program. The second is a brand new native plant garden that is going in at Penfold Park. Both projects involve Master Gardener Volunteers teaching community participants about plant identification, soil science, and sustainable gardening practices for water quality. Master Gardener Volunteers are also partnering with the Periwinkle Garden Club to improve the beautification of five public garden spaces in Frankfort.

Benzie Plant & Pest Diagnostic Services

This year was the second year to see an MSU Extension Master Gardener Plant & Pest Diagnostic Clinic in Benzie County. Master Gardeners led 5 of these monthly clinics out of the Benzonia Public Library (Mills Community House) from May to September 2018. During the clinics, residents were welcomed to bring in samples of plants, insects, diseases and other problems. MSU Extension staff and Master Gardener Volunteers were on-site to offer problem solving and plant health care advice. We will build on the success of 2019 and continue to hold monthly clinics throughout the growing season.

Other Consumer Horticulture programming and services available for residents of Benzie 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





Supporting Food and Agriculture, continued

Supporting Hop Production

In 2018, 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 Surrine 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.

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.

MSU Extension has taken a leadership role across the North Central and North East U.S. by providing valuable research and outreach to current and prospective growers on best practices for planting, harvesting, and pest management. MSU Hop Educators are in demand as speakers across the country as evidenced by invited presentations in Indiana, Vermont, Pennsylvania, and Minnesota in 2018.

MSU Extension lead publication of the Integrated Pest Management Flip Guide for Hops (English and Spanish versions), the 2018 Hop Management Guide, and were invited contributors in the forthcoming book: The Geography of Beer, Vol. 2.

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. MSU collaborated with MI LOCAL Hops (Williamsburg, MI) and Great Lakes Malting Company (Traverse City, MI) to offer very well attended post-conference educational tours.

"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 Food and Agriculture, continued

Research

MSU Extension educators continue to secure federal and state funding for on-farm research. 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. They also have a proposal pending with the USDA for Advancing Pest Management Practices, Regional Identities, and Market Access for U.S. Hops with Washington State University and Oregon State University.



Stringing hops
in Benzie County



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 Benzie County were food processing businesses and received food science, food safety, and packaging assistance. One local business participated in the Making It In Michigan Trade Show sponsored by the MSU Product Center in Lansing. The trade show provided a venue for the business to connect with retail buyers from across the state to get their products on store shelves across the state.



2018-19 MSU Product Center Impacts in Benzie 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 Benzie 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. Benzie County was an active participant in the 2018 programs.

Building Strong Sovereign Nations was designed by tribal leaders to give tribal council members an introduction to serving on a governing council. The program is offered every year in the fall in conjunction with the United Tribes of Michigan meeting and is open to leaders of all tribes in Michigan.

Benzie County commissioners also participated in a program about making your meetings more effective that was taught at a Michigan Association of Counties Regional Summit by an Extension Educator.

Benzie County Hosts MSU Extension Citizen Planner Program

Citizen Planner is a time-tested educational program proven to be comprehensive without being overwhelming.

Planning Commissions and Zoning Boards of Appeals (ZBA) have difficult and technical decisions that direct how the community grows and changes over time. MSU Extension partnered with Benzie County to offer Citizen Planner to several communities within Benzie County in the Fall of 2018. Planners, ZBA members, and zoning administrators also traveled to Benzie County from nearby counties. 25 people attended the intensive, 18-hour program.

The program is delivered locally to provide a convenient way for busy community leaders to obtain the latest technical knowledge and the proficiency they need to perform their duties more effectively and responsibly.

Citizen Planner consists of six classroom sessions, each are about 3 hours long. Citizen

Supporting Food and Agriculture, continued

Planner instructors include MSU Faculty, MSU Extension educators, planners and attorneys. The six sessions include:

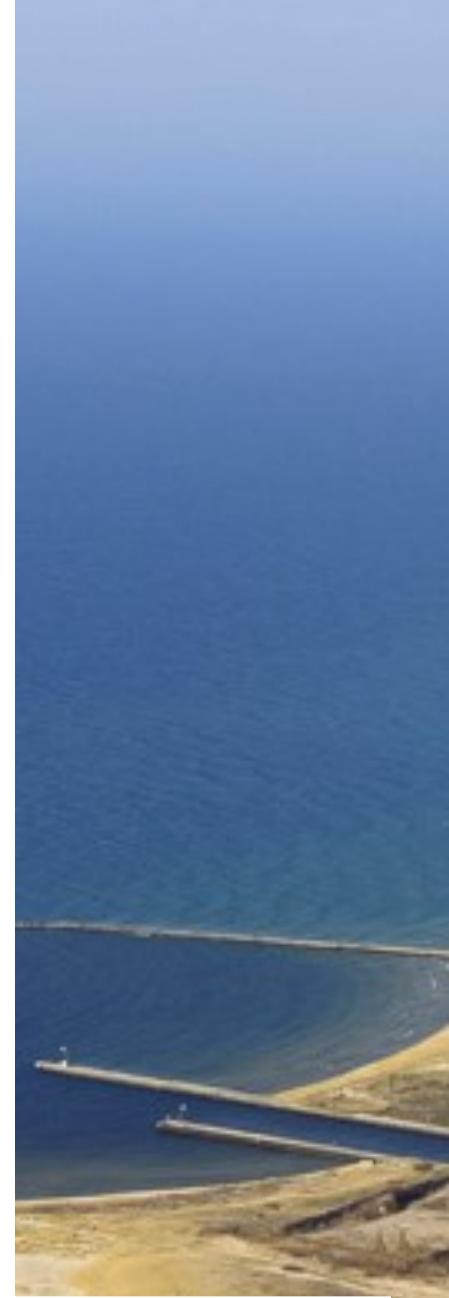
- Understanding the Planning and Zoning Context – Learn the legal sources and limitations of planning and zoning authority, and explore your understanding of ethical decision-making.
- Planning for the Future of Your Community – Recognize the function and importance of a master plan, know the process for developing one and its relationship to zoning.
- Implementing the Plan with Zoning – Discover the importance of zoning, learn how zoning is administered and gain confidence in your zoning reviews, including site plans.
- Making Zoning Decisions – Learn how to adopt and amend a zoning ordinance, understand the role of the zoning board of appeals and obtain skills in basic property development methods.
- Using Innovative Planning and Zoning – Strategize with placemaking and design-based solutions for local and regional success in the New Economy.
- Successfully Fulfilling Your Role – Strengthen your ethical decision-making skills, apply standards to your decision-making

Michigan Sea Grant: Enhancing & protecting our Great Lakes coastal resource

MSU Extension's Greening Michigan Institute supports efforts to carry out Sea Grant programs throughout Benzie 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.

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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