



***MSU Extension***

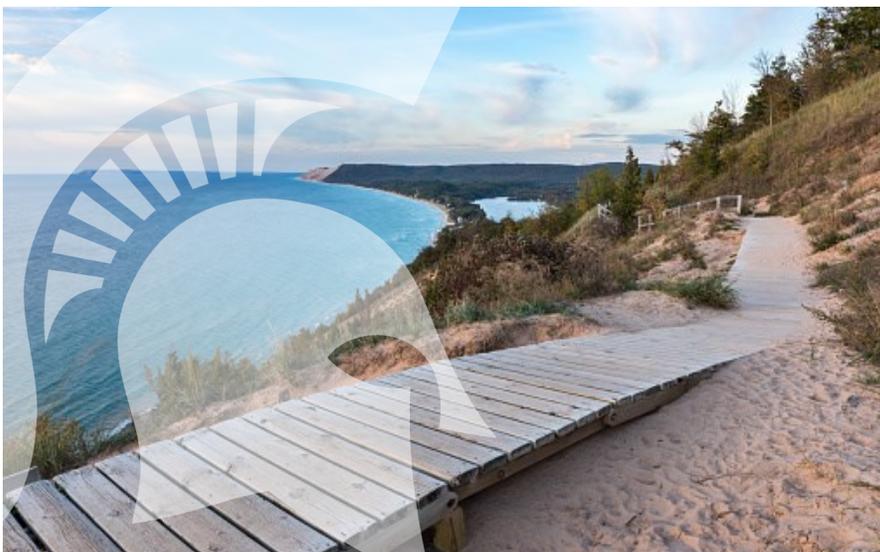
***2022-2023***

***ANNUAL REPORT***

***Benzie County***

MSU Extension offers a broad range of research-based educational outreach to county residents. Over this past year, we've continued to innovate and have 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. 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 will be able to join us during one of our upcoming programs.

~ Jennifer Berkey, District 3 Director



**257**  
**Programs**  
**Accessed by**  
**Residents**

**Social Media**  
**Reach**  
**9,341**

**Indirect**  
**Reach**  
**2,800**

**Programming**  
**Reach**  
**2,080**



# SUPPORTING AGRICULTURE AND AGRIBUSINESS

## IN 2022, MSU EXTENSION ...



Delivered 39 presentations and educational programs to 1,200+ participants.



Hosted 11 agribusiness and farm financial decision-making sessions with 36 farmers.



Received more than 25,000 individual visits to the Managing Farm Stress website, [extension.msu.edu/farmstress](https://extension.msu.edu/farmstress).



Trained 17 farmers in adult Mental Health First Aid.



***"I will use open-ended questions in personal and working relationships to improve communication between me and my friends, family, and colleagues. I will be aware of the warning signs of suicide and use the skills learned on how to direct people to seek help if they are struggling. Thank you for a wonderful presentation."***

***- Mending the Stress Fence Presentation participant***



Farming can be an incredibly unpredictable, dangerous and stressful occupation. That's why Michigan State University Extension is committed to supporting agricultural professionals as they navigate tough times and make decisions that have an impact on their families, livelihoods, operations and farms. Combining farm business management expertise with mental and behavioral health expertise, MSU Extension's team of more than 20 dedicated professionals provides innovative resources and support. From teletherapy and financial services to free online education and community presentations, MSU Extension provides a variety of knowledge and training tools — not only to farmers, but also to farm workers, local farm organization chapters, veterinarians, Farm Bureau members, county commissioners and other key stakeholders in agriculture and agribusiness.

### Community Presentations

Michigan State University Extension offers a variety of in-person and virtual farm stress educational presentations. Ranging from 20 minutes to two hours, these presentations aim to improve knowledge, awareness and skills for agricultural audiences on farm stress issues, stress management strategies and mental health resources.

### Teletherapy

Through an innovative partnership with Pine Rest Christian Mental Health Services, MSU Extension connects farmers, farm

families, agricultural professionals and commercial fishers to online counseling services ([extension.msu.edu/teletherapy](https://extension.msu.edu/teletherapy)). All therapists providing teletherapy through this partnership have an agricultural background or personal connection to agriculture, allowing them to understand the unique stressors of the farming industry.

### Mending the Stress Fence

Reduced farm sales, farm loss and consolidation of farms is creating stress for farmers and their agricultural communities across Michigan. In an effort to support farmers and agricultural workers, MSU Extension created a new farm stress program: "Mending the Stress Fence." This short, virtual program can be delivered in 30 minutes and helps participants create self-awareness and provides them with tools and resources to help those in need. Topics highlighted in the three-unit course include identification and response to signs of stress, strategies for managing stress and suicide prevention resources.

- 100% of participants increased awareness of the signs and symptoms of stress.
- 98% of participants improved understanding of the eight dimensions of wellness.
- 96% of participants improved understanding of the warning signs of suicide.
- 94% of participants increased their confidence in how to ask open-ended questions.



# SUPPORTING AGRICULTURE AND AGRIBUSINESS



2022 Dirt to Glass: Elevating Michigan Wine from the Ground Up

Over 180 attendees

Indirect activities reaching over 60,000



### Wine Grape Education Programs

The connection between farming and fine wine was celebrated with the launch of Dirt to Glass: Elevating Michigan Wine from the Ground Up. Over the two days of the inaugural conference, Dirt to Glass 2022, welcomed over 180 people from across Michigan and other midwestern states. As a collaboration between Michigan State University, MSU Extension, and industry innovators and educators this groundbreaking event succeeded in disseminating the most cutting-edge practical information in support of the Michigan grape and wine industry.

***“It was the first time a program evaluated soil from this depth to help us understand what is going on in our vineyards... This confirmed a lot of what we knew and shed some new light on how we need to think moving forward.”***  
***- Bryan Ulbrich, owner and winemaker at Left Foot Charley, Traverse City***

To increase accessibility to participants across the state, most educational activities were held as hybrid meetings and broadcast on-site over Zoom.

**14 programs with 800 attendees funded by a \$5,000 Project GREEN mini-grant and \$21,746 from the MI Craft Beverage Council**

A variety of indirect activities succeeded in reaching over 60,000 people this year: 26 articles and weekly updates on the MSU Extension website and in local and national publications such as American Fruit Grower magazine, two journal articles in BIO Web Conference and Nature Portfolio, two public radio interviews on Brownfield Ag news and WCMU Public Radio, one educational video published on YouTube, one brochure on Michigan grape production and challenges, and management of Michigan Grape and Wine Industry and Dirt to Glass Conference Facebook and Instagram pages.

**Wine-Grape Research Being Conducted in Northern MI**  
**Modeling Michigan Grapevine Cold Hardiness**—In April 2022, we began monitoring the evaluation of grapevine’s cold hardiness by deploying 20 weather stations and base stations at project sample sites in Northwest and Southwest Michigan. All



GRAND TRAVERSE FRUIT GROWERS COUNCIL  
Traverse City, Michigan



## NORTHWEST MICHIGAN ORCHARD AND VINEYARD SHOW

### January 17th & 18th 2023

Location	Content
Grand Traverse Resort and Spa 100 Grand Traverse Village Blvd Acme, MI 49610	Tuesday and Wednesday will offer a variety of topics relating to research information on tart and sweet apples, and wine grapes.

Over 315 tree fruit and wine grape producers

One registration fee and attendees access to all fruit sessions and grape sessions for both days. Cost for both days.

Apple and grape sessions will be held on both days. Sessions will conclude with a social hour.



Robotic laser bird repellent



Sampling site wireless sensor networks

sample sites' wireless sensor networks have been deployed to collect detailed temperature, humidity, and light intensity data. After harvest, when the grapevines are acclimating and preparing for the dormant season, dormant buds are carried to the Northwest Michigan Horticulture Research Center (NWMHRC), for low-temperature exotherms (LTE) using differential thermal analysis (DTA). The weekly sampling and DTA testing will continue until budswell in spring 2023.

**Research project funded by a \$40,000 Project GREEN grant and \$20,172 from the MI Craft Beverage Council**

Spore trapping for multiple vineyard pathogens—Downy mildew, powdery mildew and Botrytis bunch rot are devastating diseases of grapevines in Michigan, and the MSU fruit team proposes a team-based scientific approach to develop a monitoring system that limits the destructive effects of these vineyard diseases.

Robotic laser bird repellent—A laser bird repellent is one of the more visual and high-tech solutions for bird control. This bird-repellent method takes advantage of the natural instincts of birds; they see the approaching laser beam as a predator and

take flight to seek safety when the laser beam passes by. First-year results have been collected, and as each grape variety ripens at a different time, year-two results will be collected through the harvest season when the test varieties became fully ripe.

### Northwest MI Orchard and Vineyard Show 2023

The attendance for the annual Northwest Orchard and Vineyard Show was close to pre-pandemic numbers this January. We hosted over 315 tree fruit and wine grape producers to the Grand Traverse Resort. In addition to participants, we had over 50 vendors showcasing the newest equipment and products available for 2023. The lineup for educational speakers was top notch and included researchers on two national Specialty Crop Research Initiative projects from Michigan State University, Utah State University (USU), and Clemson University. Dr. Brent Black and his team from USU updated the crowd on some excellent new research using unmanned aerial vehicles to collect precise data in tart cherry systems. Dr. Todd Einhorn, from MSU, provided a recap of irrigation work conducted at the NWMHRC with the help of a student assistant. The show provided great information on tree fruit disease management strategies, and allowed Erin Lauwers, the new Integrated Pest Management (IPM) educator at the NWMHRC, time to present on her work.

The MSU Extension team shares the stage with the National Cherry Festival at the Cherry Industry Luncheon. This year,



Michigan Cherry Committee - Cherry Industry's Distinguished Service Award winner

Jim Nugent, former Extension specialist



Master Gardener volunteer hours support food security, community beautification, invasive species management, and water quality



Michigan Cherry Committee awarded former Extension Specialist, Jim Nugent, with the Cherry Industry's Distinguished Service award. Since his days in Extension, Jim has remained active in the cherry industry and with MSU research projects. He has recently served as the Chair of the Michigan Tree Fruit Commission, a great grower- supported group that has invested in the tree fruit research stations at MSU.

### MSU Extension Master Gardener Program

In 2022, MSU Extension Master Gardeners volunteered for 767 hours in Benzie County, valued at nearly \$23,000. MSU Extension Master Gardener volunteer activities impacted county residents by improving quality of life, empowering youth, protecting waterways, and improving food security. Providing flowering plants to support butterflies, bees, and other pollinators was also the focus of several projects in 2022.

MSU Extension Master Gardener Volunteers, in partnership with SEEDS, hosted middle school students from the SEEDS EcoSchool program at Benzie Central Middle School. During six consecutive weekly visits, students learned about plants, gardening, and pollinator conservation, while working in the gardens alongside MSU Extension Master Gardener volunteers.

MSU Consumer Horticulture staff and MSU Extension Master Gardener Volunteers hosted a plant diagnostic clinic at the Benzonia Public Library from May through October of 2022. Residents brought samples of plants, insects, diseases and other problems for MSU Extension staff and Master Gardener volunteers to provide the expertise and diagnose problems and provide management recommendations.

Benzie County residents were able to receive answers to their horticultural questions by using either the online service Ask Extension or MSU Extension's statewide Lawn and Garden Hotline (1-888-678-3464), which are hosted by teams of MSU specialists, educators, and MSU Extension Master Gardener Volunteers. County residents are always welcome to call, visit, or email the MSU Extension office for assistance with horticultural issues.

**Extension Master Gardeners volunteered 767 hours valued at \$22,971**

**260 pollinators were counted by 51 citizen scientists on flower planters in Downtown Frankfort**



251 youth enrolled

41 adult volunteers



2,414 lbs. of meat donated

## JUNIOR DIVISION 4-H SKILLATHON

First Place: Lillian Wasson, Benzie - 81.5%



# 4-H SOCCER

## Benzie Area Youth Soccer



Over 150 players



### Representing Benzie 4-H

Youth from the Benzie County 4-H program represented on the state-wide stage this year. Lillian Wasson, of Benzie and Grand Traverse, took first place in the state Michigan 4-H Skillathon Junior age competition for the third year running. 4-H Skillathon is an annual event that allows 4-H livestock youth to test their knowledge of different livestock species and general agriculture against their fellow 4-Hers. Youth from all over Michigan compete in regional qualifying rounds and must earn a minimum percentage score to be invited to compete at the state level. Bethani Schuiteman, Junior – Manistee, took second place at the state level. Wasson and Schuiteman have held their first and second place positions in this competition for three years in a row.

Benzie is also sending three youth and two instructors to campus for 4-H Exploration Days, MSU's pre-college three-day summer program. Exploration Days allows students to experience campus and dorm life while selecting from over 200 session choices covering a wide range of topics and interests. Thanks to our local Tractor Supply Co. Spring Clover Campaign and the funds raised, we can supply full scholarships to two youth attending. We will also be sending instructors to teach a session on campus this year. Benzie's virtual SPIN (Special Interest) Club, Pippin's Pantry, is being instructed in-person for the first time at 4-H Exploration Days. Open to 25 youth, this session explores DIY dog treats, dog-

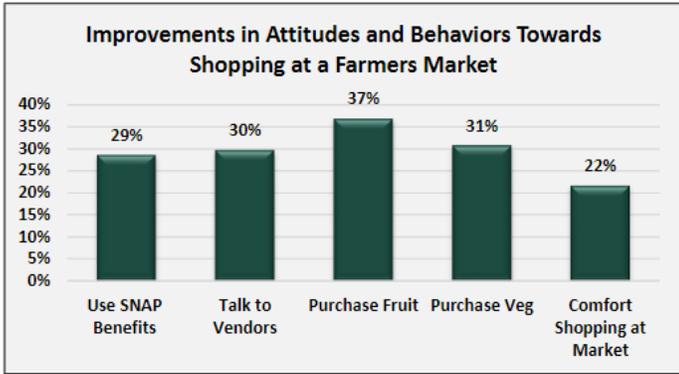
safe people foods, basic veterinary principles and canine CPR and Heimlich maneuver.

### Fair 2022

Benzie 4-Hers can take part in one of two local fairs – Northwest Michigan or Manistee County. Both events had record breaking attendance and auction sales, but the hidden gem of these events is the impact that makes it back to community members. There were a total of 2,414 pounds of Benzie 4-Her's livestock projects that were bought through auctions and then donated back to the community as food donations to two local food partners – Benzie Area Christian Neighbors (BACN) and The Gathering Place – feeding those in need in Benzie County.

### Fall Soccer 2022

Benzie Soccer got a reboot in 2022 with a restructured program, new coaches and better equipment made possible from a generous donation of \$6,000 from the Paul T. & Frances B. Johnson Foundation. The reboot enabled there to be smaller teams and appropriately sized youth fields and goals, which lead to more playing time, better skill building and increased retention of players for the more than 150 youth who registered to play last fall. Our Soccer Advisory Committee worked hard on the restructuring of the program, working with Benzie Central Varsity Athletics to the benefit of both programs.



Health Program  
Total Reach:  
1,151



### Fruit and Veggie Prescription Program

The Fruit and Vegetable Prescription Program is designed to help patients with chronic disease create healthy eating habits and increase access to fresh produce. In 2022, MSU Extension provided in-person, direct education to participants who received up to \$100 in tokens to redeem fresh produce and/or seedlings at the Grow Benzie Farmers Market. MSU Extension partners with Munson Healthcare to deliver the program locally.

- In collaboration with Munson Healthcare and MSU Extension, Community Nutrition Instructors provided nutrition education to a total of 64 participants using the Discover Michigan Fresh curriculum through September 2022.
- As a result of the program, 31% of participants reported an increase in vegetable consumption and 39% of participants reported an increase in fruit consumption.
- 31% of participants reported an increase in positive attitudes and behaviors toward purchasing vegetables at the farmer's market.



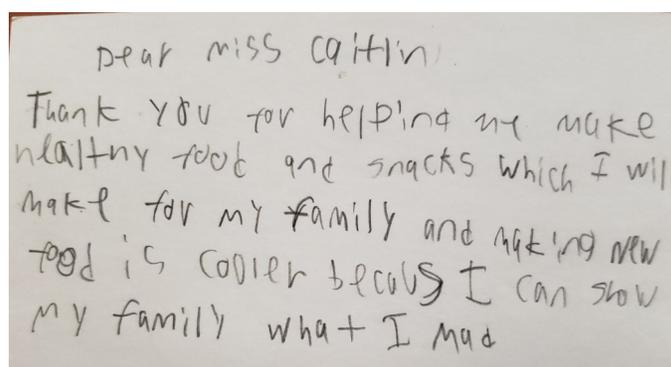
### Red Bag Meal Program

The Red Meal Program is a partnership with Benzie Senior Resources, BACN and MSU Extension. This program provides meal bags twice a month to homebound seniors in the area. Bags are packed by BACN volunteers, delivered by Benzie Senior Resources through the Meals on Wheels program, with nutrition and physical activity information provided by MSU Extension. The first bag of the month is a standard grocery bag, second bag of the month highlights a fruit/vegetable, and has a recipe for participants to try along with all the ingredients needed to make the recipe.

There are 20 participants in the program and they are surveyed twice a year by phone and reported:

- 57% tried the MSU Extension provided recipes
- 79% are very satisfied with the amount of food in the red bags
- 71% want more fresh produce in bags

***“Because of this program, I feel better.”***  
***- Fruit & Vegetable Rx Program Participant***



## Direct Education with Youth

Youth in grades Kindergarten through 12th in Benzie County participated in a variety of MSU Extension nutrition and physical activity lessons in 2022. Our direct education classes partner with schools where more than 50% of students receive free or reduced priced meals. These classes engage students in interactive nutrition lessons, get them up and moving in short physical activity breaks and discover new foods through taste tests. Middle and high school students go more in-depth by learning how to safely cook healthful foods. These students learn knife safety, how to read and follow recipes and how to adjust recipes to fit their tastes. These are also basic skills that can serve them in finding future employment.

***"I did this by myself! I can't believe I made this by myself! I can make this at home!"***

***- Benzie Central 7th grade student***

***"It's so good, it's Instagram worthy."***

***- Frankfort HS student after making omelets***

**698 youth reached**

**31% increased vegetable consumption**

**32% increased fruit consumption**

**36% reduced sugary beverage consumption**

**25% washed their hands more often**

**39% reduced their screen time habits**



# FOSTERING STRONG COMMUNITIES



1 New Business  
1 New Business  
License Secured



**15TH ANNUAL  
FRESHWATER SUMMIT**  
Friday, October 28, 2022  
9:00am - 3pm  
Hagerty Center



## MSU Product Center Business Development

The MSU Product Center joined Oryana and Crosshatch to offer \$11,000 in zero interest loans to regional food and farm businesses. These loans help businesses scale to meet more demand for local food.

The MSU Product Center joined a coalition led by Crosshatch to launch the region's first Carbon Farming Cohort. This peer-to-peer learning program helps farmers adopt climate resilient agricultural practices.

## Michigan Sea Grant Extension

Dedicated to the protection and sustainable use of the Great Lakes and coastal resources, Michigan Sea Grant is a cooperative program of the University of Michigan, Michigan State University, and the National Oceanic and Atmospheric Administration. We fund research, education, and outreach projects designed to foster science-based decisions about the use and conservation of Great Lakes resources. Efforts this year included co-planning the 2022 Freshwater Summit in October 2022 which had over 125 people in attendance

## New Commissioner School

For over 50 years, the New Commissioner School (NCS) program has provided county commissioners, both newly elected and returning, with the preparation they need to enter their new term prepared to lead their counties successfully. One participant from Benzie County participated in the NCS in 2022, which included online self-paced learning and an in-person session with plenty of opportunity for networking with participants from other counties.

## Northern Michigan Counties Association (NMCA)

County delegates to NMCA launched a successful hybrid format for 2022. In-person participation stayed strong, with several more able to participate via Zoom when they couldn't be there in-person. Participants share lessons learned in their counties, learn about topics currently impacting county government, and discuss the impacts of pending legislation on county government. A series of meetings from late 2021 through early 2022, explored both House and Senate bills aimed at solving problems with provision of Community Mental Health services. Other topics in 2022 included broadband, early childhood programs, state revenue sharing, Open Meetings Act, the Northern Michigan Children's Assessment Center, and a tour of Camp Grayling.



***“On behalf of all in attendance, thank you for your time and the knowledge you shared to help us better understand planning and zoning. I feel it was a great program for those both new to and familiar with the subject. The interactive Spartyville exercises were a fun way to reinforce material you presented.”***

***-Shelley Greene, Zoning Administrator,  
Colfax-Thompsonville Joint Planning Commission***



## Strategic Planning

Michigan State University Extension Government and Community Vitality Educator, Mary Reilly, provided training “Risk Reduction in Planning and Zoning (a.k.a. 28 Ways to Stay Out of Court)” to Colfax-Thompsonville Joint Planning Commission.

MSU Extension provided a training, “Planning to Plan,” an interactive overview of how a Planning Commission can best prepare for a Master Plan update and what’s involved in the planning process. Colfax-Thompsonville Joint Planning Commission participated in this training.



## ***Festival of Trees***

***The Benzie County MSU Extension office decorated and donated a Spartan themed wreath to Habitat for Humanity’s Festival of Trees. All of the money raised during this annual event is donated to Habitat for Humanity of Benzie County.***

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