



MSU Extension

2022-2023

ANNUAL REPORT

Leelanau 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 Leelanau 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



294

Programs Accessed by Residents

Social Media Reach

42,676

Indirect Reach

4,552

Programming Reach

5,105



SUPPORTING AGRICULTURE AND AGRIBUSINESS

NORTHWEST MICHIGAN ORCHARD AND VINEYARD SHOW
January 17th & 18th 2023

Location
Grand Traverse Resort and Spa
100 Grand Traverse Village Blvd.
Acme, MI 49610

Content
Tuesday and Wednesday will offer a variety of topics relating to research and information on tart and sweet cherries, apples, and wine grapes.

One registration will give attendees access to both the tree fruit sessions and grape sessions for both days. Cost for both days is \$50 in advance or \$55 at the door.

Cherry, apple and grape sessions will be held on both days. Tuesday's sessions will conclude with a social hour.

REGISTER NOW

Cherry Marketing Institute

MSU Extension

4H



Northwest Michigan Orchard and Vineyard Show



Sampling site wireless sensor networks



Over 315 tree fruit and wine grape producers



Robotic laser bird repellent

After harvest, when the grapevines are acclimating and preparing for the dormant season, dormant buds will be tested at the Northwest Michigan Horticulture Research Center (NWMHRC) for low-temperature exotherms using differential thermal analysis (DTA). 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 become 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 (MSU), 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 educator at the NWMHRC, time to present on her work.

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



Dr. Todd Einhorn hosts pruning demonstration



Jim Nugent, former Extension specialist, winner of Cherry Industry's Distinguished Service award.



of the Michigan Tree Fruit Commission, a great grower-supported group that has invested in the tree fruit research stations at MSU.

NWMHRC Staff Host Apple Pruning Demonstration

In April 25, 2023, Nikki Rothwell and Erin Lauwers of the NWMHRC, hosted Dr. Todd Einhorn, Department of Horticulture at MSU, at a pruning demonstration in Leelanau County. The afternoon-long event was attended by 35 people from counties across Northwest Michigan. We held the demonstration at the Bardenhagen Farm in Suttons Bay. Jim Bardenhagen served as the Leelanau County Extension Director for 25 years and still farms in the county with his son, Chris Bardenhagen. The diverse farm has many crops including table grapes, currants and potatoes, but the pruning was conducted on apples trees of various ages. The demonstration started in trees planted in spring 2023. We moved to two-year-old trees, then to four-year-old trees. Dr. Einhorn explained key components of properly pruning trees at each stage of tree development and orchard establishment. We also pruned trees that have been in the ground for eight years. Pruning strategies have been updated over the past eight years, so we addressed corrective cuts to help bring these trees into optimal bearing conditions. We pruned both Honeycrisp and Gala varieties, which are both

excellent varieties for northwest Michigan. Based on demographic data, participants who attended the pruning demonstrations were from the following counties: Leelanau, Antrim, Grand Traverse, Cheboygan, Benzie and Kent.

2022-2023 Hop Research, Education, and Outreach

Research

MSU Extension educators, professors, specialists, and graduate students continue to secure federal and state funding for hop research in Leelanau County and beyond.

MSU Hop Research Projects with Northwest Michigan hop growers and stakeholders

Research Project	Hop Growers & Stakeholders
SAP Analysis to Improve Nutrient Management and Hop Quality	MI Local Hops
Untapping Terroir: Experimental Evidence of Regional Variation in Hop Flavor Profiles	Michigan hop producers and Cambium Analytica in Traverse City
Integrated Practices to Managing Cone Diseases	Hop Alliance and MI Local Hops
Testing and Managing for Hop Virus and Viroids	Hop Alliance and MI Local Hops
Management Strategies for Plant-Parasitic Nematodes in Hopyards	Hop Alliance and MI Local Hops



SUPPORTING AGRICULTURE AND AGRIBUSINESS



Over 550 attended from across U.S.



Judges evaluated hops



Dog Star Hops won Chinook Cup



Local Partners and Stakeholders	
Alex Adams	Cambium Analytica
Mike Moran, President	MI LOCAL HOPS
Brian Tennis	Hop Alliance
John Hardy	Hop Alliance
Scott Stuhr	Silver Spruce Brewery

Hop Education and Outreach

MSU Extension continues to deliver educational content in a variety of forms including conference presentations, the annual MSU Hop Management Guide for growers, peer-reviewed journal articles and more.

MSU Annual Spring Hop Kickoff Meeting

MSU Extension hosts the annual online ZOOM meeting with hop growers, researchers, specialists, and additional stakeholders. The meeting includes important updates to the MSU Hop Management Guide, pest control options and recommendations, irrigation and fertility best practices, and updates from the Hop Growers of Michigan.

MSU Hop Bine and Dine Webinar Series 2022-2023 May-August

MSU Extension hosts a bi-weekly online meeting that brings together hop producers, educators, scientists and

more to discuss current growing conditions and best management practices.

Michigan's Great Beer State Conference & Tradeshow

- Organized and hosted by the Michigan Brewers Guild, MSU Extension and the Master Brewers Association of the Americas-District Michigan
- Took place January 11-13, 2023 at Radisson Plaza Hotel at Kalamazoo Center
- The premier Midwest brewer-grower conference and tradeshow
- Six invited conference speakers were from MSU
- Over 550 speakers, trade-show representatives and attendees from across the country
- Over \$200,000 of direct economic contribution to local economy

Collaboration

MSU Coordinates the Great Lakes Hop Working Group — a multi-state collaborative comprised of university scientists, specialists and government agriculture workers — that develops hop research and education priorities to meet



SUPPORTING AGRICULTURE AND AGRIBUSINESS

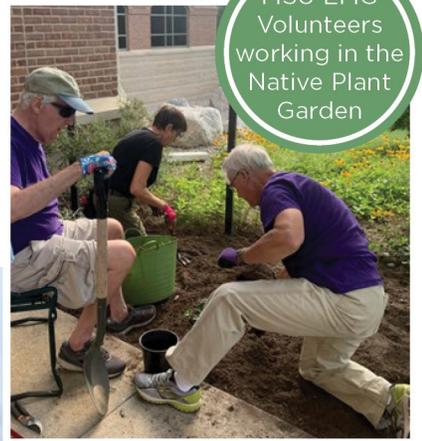
Native Plant Garden at Leelanau County Government Center



Extension Master Gardeners volunteered 1,168 hours valued at \$34,981

73 horticulture or pest management questions answered

MSU EMG Volunteers working in the Native Plant Garden



Tree pruning and planting in Point Oneida

PHOTO: MATTHEW MOHRMAN, NATIONAL PARK SERVICE

the needs of hop growers across the Central and Eastern U.S. and Canada.

MSU works hand in hand with the Hop Growers of Michigan, a 501(c)(5) non-profit organization, whose mission is to: Advance the interests of Michigan hop growers and the Michigan hop industry through support of research and educational initiatives and promotion of Michigan-grown hops.

Master Gardeners Continue to Educate Citizens

This year, through volunteer outreach, MSU Extension Master Gardeners continued to share science-based gardening knowledge, engage citizens and empower communities in environmentally responsible gardening practices. Currently, MSU Extension Master Gardener Volunteers are actively volunteering in 24 volunteer projects throughout the county. In 2022, Leelanau County MSU Extension Master Gardeners volunteered for 1,168 hours, a time contribution valued at nearly \$35,000. MSU Extension Master Gardener volunteer activities impacted county residents by improving quality of life, empowering youth, protecting waterways and improving food security.

The native plant educational garden at the Leelanau County Government Center continues to thrive as it is maintained by MSU Extension Master Gardener Volunteers. Visitors and

employees of the county government center can see plants unique to our region and learn about their importance to pollinators and other wildlife.

Through collaborations with local libraries, the Leelanau Conservation District and the National Park Service, MSU Extension Horticulture staff provided a variety of education opportunities to county residents. In the past year, residents learned about vegetable gardening, invasive forest pests, pollinator conservation strategies, and fruit tree care.

County residents are always welcome to call, visit or email the MSU Extension office for assistance with horticultural issues. Additionally, MSU Consumer Horticulture staff and MSU Extension Master Gardener Volunteers hosted a plant diagnostic clinic every Wednesday June through September of 2022. Residents were welcomed to bring samples of plants, insects, diseases and other problems for MSU Extension staff and Master Gardener volunteers provided the expertise to diagnose problems and provide management recommendations for 73 county residents. In addition, Leelanau 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.



Farm Business Management

Working with 14 area farms (30 individuals), MSU Extension Educator Stan Moore helped farmers complete a financial analysis on their farm financial records. Farmers who participate have a greater understanding of their farm financial strengths and weaknesses, and how they can improve upon their financial standing going forward. These farms represent over 70 jobs and had over \$9.7 million in sales in 2022.

Year-end tax estimate meetings provided farmers with the opportunity to save over \$118,000. Those income tax savings result in more resources being available for purchases by these farmers in their communities.

More than 150 individuals attended Agriculture Labor sessions, coordinated by Moore at the Great Lakes Fruit, Vegetable and Farm Market Expo held December 2022. Moore also provided multiple labor education meetings to farmers, including an out of state program for young farmers in Nebraska.

Year-end tax estimate meetings provided farmers with the opportunity to save over **\$118,000**

14 area farms representing over **70** jobs and **\$9.7 million** in sales in 2022 completed financial analysis of their business

MSU Seeks to Help Farmers Manage Stress

Moore worked with multiple northern Michigan farmers to ensure a successful farm transfer to the next generation. Many of these farmers are using resources through the “Legacy of the Land” farm stress project, funded by Michigan Department of Agriculture and Rural Development and federal grant dollars.

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



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.



Trained 17 farmers in adult Mental Health First Aid.



NATIONAL
SUICIDE PREVENTION
LIFELINE
1-800-273-TALK (8255)
suicidepreventionlifeline.org



“I will use open-ended questions in personal 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.”

-Mending the Stress Fence

organization chapters, veterinarians, Farm Bureau members, county commissioners and other key stakeholders in agriculture and agribusiness.

Community Presentations

MSU 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). 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.

Online Counseling Services



Mending the Stress Fence

Reduced farm sales, farm loss and consolidation of farms is creating stress on farmers and their agricultural communities all 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.

Reported Results of the Mending the Stress Fence program

- **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.



DEVELOPING YOUTH AND COMMUNITIES

284 youth enrolled in clubs

2,300 youth, staff and community members reached through five school farm markets

100% of the animals that were put up for auction were sold

Gross sales from the auction totaled: **\$1,004,054.00**

10 Junior Beef projects were purchased by 4-H supporters and **donated** to 4-H youth to raise as market beef projects for 2023

Sail Champion Camp



Tap Time



Northwest MI 4-H Shooting Sports Club



Local Club Growth and Activities

Our two Leelanau 4-H shooting sports clubs continued to grow this year. The Northwest Michigan Shooting Sports 4-H Club ran two sessions for youth at Myles Kimmerly in the fall, reaching a total of 32 youth, including one teen leader and two certified volunteers to teach. The club met six times and provided new archery t-shirts for all of the members. Thunderbirds on Target Archery Club at The Leelanau School grew to 12 youth members, under leadership of Joe Blondia, and has been meeting since fall. The club added fishing to their outdoor activities at the school, supported through the purchase of two new fly fishing rods.

Leelanau County added two new 4-H clubs this year: Tiny Tappers for Cloverbuds (ages 5-7) and Tap Time (for youth ages 7-9, and experienced Cloverbuds). New 4-H volunteer Robin Carden led these tap dance clubs after school at Leland Public School, and ran four separate sessions of Tiny Tappers and three sessions of Tap Time, with performances at the end of each. Co-leaders, including teen leaders, assisted throughout the year, and worked with the 17 youth taking part. These active clubs helped to meet the need of local families searching for things for their younger children to do.

Our Leelanau County School Farm Markets were back in person this year, reaching five school districts: Glen Lake,

Leland, Northport, St. Mary and Suttons Bay. The markets were held outdoors in open areas, with local farmers providing fresh produce and other products for the students to purchase and sample. MSU Extension provided 4-H lessons, crafts, a basic petting zoo (with 4-H club projects, including very popular baby goats) and free giveaways. The Northwest Michigan Horticulture Research Center provided an apple press and free apples. Our famous smoothie bike was on site — allowing youth to take part in healthy exercise and a delicious treat. We reached a total of 2,300 youth, staff and community visitors.

We added a new STEM-based after-school 4-H club called Make Our Way 4-H Club. The leader decided he would incorporate the Apple grant iPads to encourage youth to come up with new club plans throughout the year and have hands-on outdoor learning part of the plan. In the fall, the youth focused on designing and building models of tree houses. In the spring, they added more youth to the club so they could add a Dungeons and Dragons portion to the club with actual map-making and orienteering built in. The club is held at Leelanau Montessori Public School Academy.

Our 4-H horse clubs have been very active this year — Pony Pals, Happy Hooves and Hidden Beech are actively reaching youth through introductory horse projects, attending horse shows and celebrating with new traditions. Two new



DEVELOPING YOUTH AND COMMUNITIES



Horse camp



Babysitting Club making first aid kits

4-H'er learning to drive their first tractor



traditions are Halloween Costume Contest put on by Hidden Beech Equestrians and taking part in the Leland Parade for Pony Pals. Hidden Beech also provided two one-day Horse Camps for interested youth with the teen leaders and leader Eleanor Miller creating a successful experience for these young riders. Happy Hooves takes part in multiple horse shows and attends our fair each summer.

Club Recognition, Empowerment and Learnings

We celebrated our 4-H youth and volunteers at the Bay Theatre in Suttons Bay with our annual awards celebration. We worked with the theatre to offer an awards presentation with trophies, certificates and gift cards. About 80 people attended and enjoyed pizza, clover-shaped cookies, and a showing of Shrek with handmade Shrek ears for every participant.

The Leelanau County 4-H Babysitting Club partnered with Suttons Bay Bingham Fire and Rescue Department for its sixth year and provided five sessions of training in February. CPR/First Aid Training and American Heart Association certification was provided to the 18 youth participants using MSU Extension curriculum and assistance from the Fire Chief. Club leaders worked alongside a teen leader and adapted the 4-H babysitting curriculum to create a more hands-on approach to the lessons for youth. Members ranged in age from 10 through 14 and joined in from three counties and six different

schools. Youth received items for various crafts, a first aid kit and a binder with their curriculum. They also prepared snacks each meeting, created crafts and worked together to learn important lessons like diapering and feeding babies.

Our Northwest Michigan 4-H Livestock Council worked closely with 4-H staff and MSU Extension educators to offer an education expo held at the Great Wolf Lodge. There were 23 educational sessions offered to youth members, adult volunteers and family members in order for them to complete their educational credits to take part in the auction at fair. Over 500 4-H youth, family members and volunteers were in attendance. The day was a large success and the Council is already planning next year's event to be held at the Grand Traverse Resort.

4-H Capitol Experience Youth Summit — offered statewide — was back in person this year with a teen from Leelanau County serving on the Steering Committee. Youth were able to attend the three-day event in Lansing to tour the Capitol Building, work with groups of teens, and meet senators and legislators. This program is a way for our local youth to learn about government and take part in issues discussions in a meaningful way.

Leelanau County 4-H was able to offer our annual 4-H Tractor Safety program in April, May and June. Our two 4-H volunteers worked with staff to present lessons in person,



DEVELOPING YOUTH AND COMMUNITIES



4-H
Pathfinder
Garden Club



Students use
GarageBand
in music class
through Apple
Grant



Viticulture
students
working on
first pruning



MakerFest



Leelanau
Boys Golfing
at Expo
Days

using the new “Purdue Extension Gearing Up for Safety” curriculum. The lead instructor, Mark Miezio, built time with tractors into each lesson day, so youth had experience prior to the test. We partnered with the Northwest Michigan Horticulture Research Center to provide the learning space and a by-appointment driving and written testing day in June, using the Center’s tractors. All 14 youth (ages 14-15) who took part in the program passed their driving and written tests and received their certificates to drive this summer.

Grants and Partnerships

Leelanau County 4-H joined the MSU Extension/4-H Apple Education Community Initiative grant and received: a classroom supply of iPads, Apple Pencils, a rolling charging cart, a classroom set of headphones, and a collection of Sphero robots for STEM-focused learning. These tools will be used in clubs, programs and in partnership with our local schools. From February through June, Suttons Bay Elementary School implemented the iPads to work with 4th and 5th grade students in their art and music classes. The teachers used this technology to reach 39 youth. We hope to continue this partnership in the fall to build more programs and reach more youth in Leelanau with technology.

Leelanau County 4-H partnered with Grand Traverse County 4-H to offer our first 4-H Viticulture Program. We worked

with 19 students from Greenspire High School, and students who reside in Benzie, Grand Traverse and Leelanau Counties. A 4-H volunteer, who also works in Leelanau for a winery, took the youth on school buses for three Friday field trips. The first two trips were to Leelanau County. The first trip was to the Horticulture Center for a pruning lesson with Esmaeil Nasrollahiazar, a MSU Extension Viticulturist Educator. The second was a tour of the cellar and vineyard at 45 North Vineyard and Winery in Lake Leelanau. The third trip was at Chateau Chantal on Old Mission Peninsula, with the lead writer of the curriculum, Cristin Hosmer. Students worked with soil and soil sampling in the chateau’s newest vineyard space.

Leelanau 4-H partnered with Grand Traverse 4-H again to take part in MakerFest 2023 at the Civic Center in Traverse City. We created a STEM trivia game using the iPad, provided prizes, had giveaways and free crafts, and offered the opportunity to make giant bubbles with our Cloverbud chair. We reached 155 youth and their families through this outreach event, and many said that our offering was the most fun!

Leelanau 4-H is working in partnership with The Pathfinder School to offer Jr. Master Garden programming and curriculum to help support their work on the school’s garden area. The Rotary Club of Suttons Bay-Leelanau provided a grant to support the purchase of compost and soil to add to the



DEVELOPING YOUTH AND COMMUNITIES



4-Her's learn how to make items from natural fibers



Everett Howell with 4-Hers at Capital Experience



Cherry Festival Queens and Gotta Lluva Cool Critter Orchard Tours



Gotta Lluva Cool Critter Costume class

school's raised beds in the new greenhouse that was purchased last year through a 4-H Foundation grant. Through this 4-H programming, the school is offering horticulture lessons to all students — kindergarten through eighth grade. The 4-H Jr. Master Gardener club is meeting twice a week at the school with a focus on field trips around Benzie, Leelanau and Grand Traverse counties.

4-H Exploration Days was held on the MSU campus in June. Leelanau County and other county 4-H delegations traveled in two Leland School buses down and back. Participants experienced this amazing pre-college event: living in the dorms, learning in hands-on educational sessions, and having their own adventures with new friends on campus.

Leelanau 4-H is continuing its partnership with the Maritime Heritage Alliance and offered two one-day sailing adventures aboard the Champion, a classic sailing vessel. Youth were thrilled to be part of the crew and learned knot-tying, navigation, how to lower and raise sails, and more during these all-day camps. They experienced the added adventure of sailing to Power Island, mooring, and getting the chance to swim in West Bay.

Leelanau 4-H partners with our local libraries every year. We held events in partnership with Leland Township Library and Suttons Bay Bingham District Library in July. Activities

included: petting zoos with rabbits, poultry and goats; free Cloverbud crafts, and 4-H giveaways. We also partnered with Parenting Communities and took part in their street fair. We reached hundreds of visitors at these fun events.

Orchard Tours and More was held at the Northwest Michigan Horticulture Research Center the week of Cherry Festival this July. Our 4-H clubs and staff were there to offer petting zoos, bake sale fundraisers, Cloverbud craft activities, a Money Carnival activity, and free giveaways. This is a great way for our 4-H youth and their animals to prepare for the crowds at fair.

Record-Breaking Fair

The Northwest Michigan 4-H Livestock Council held its 50th Annual 4-H Livestock Auction in August 2022, and broke the record by bringing in over \$1 million. Youth and volunteers were thrilled to be showcasing their skills and animal projects, and several non-animal projects were showcased in the 4-H Exhibit Building. Leelanau County youth were winners in our shows and auction this year: seven youth won Grand Champion and Reserve Grand Champion ribbons with their animals, and one won Overall Grand Champion. Four Leelanau 4-H clubs won barn awards, and two 4-Hers won two of the three Heather Barley Scholarships. A youth also won the 4-H Clover Award. The resale auction was a big success and funds from the auction helped to support our Leelanau County 4-H Youth Association.



KEEPING PEOPLE HEALTHY & ENSURING SAFE FOOD



Connecting Early Childcare to Nutritious Foods

MSU Extension continues to partner with the Father Fred Foundation on the Pantry2Preschool program. The program has grown to 189 families at 10 early childcare sites. The program is designed to connect families who are experiencing food insecurity to healthful foods. Meal boxes are provided to targeted childcare sites twice per month and include ingredients to create a nutritious family-friendly meal along with a recipe. Children at the participating sites also receive hands-on, interactive nutrition education. The Grand Traverse Band Benodjenh Center in Leelanau County

is one of the schools participating in the program since it started in 2020.

One family shared that the program helps them by providing a staple meal that includes fruits and vegetables.

Show Me Nutrition

Benodjenh Head Start Preschool students participate in nutrition education provided by MSU Extension. In this program, kids learn about the five food groups and how food fuels their bodies. The students also get to try new foods that include fruits, vegetables, and whole grains.

Supporting Local Food Pantries

MSU Extension continues to partner with Leelanau Christian Neighbors by providing food pantry-focused recipes and food demonstrations at the pantry site.

Cooking for One

Through the development of a new partnership with Sharecare of Leelanau, MSU Extension has offered nutrition education through presentations highlighting how to shop and meal plan while cooking for one. Seniors shared they were happy to make new recipes that were easy to prepare and delicious.

*"With the rise in grocery prices this helps us financially. We are so **grateful** for this program!"*

*"My kids look forward to the boxes each time they are delivered to see the **colorful recipe** and produce."*

*"The Pantry2Preschool boxes **take away a little** stress at dinner time."*

*"We have tried vegetables provided in the food boxes that my family would not have purchased or known how to prepare otherwise. This is a great way for us to **try new foods.**"*



**2023
Barrier Buster
Winner**



**Hallstedt
Homestead**



MSU Product Center Business Development

Hallstedt Homestead was honored with the Barrier Buster award at the 2023 Making it in Michigan Conference and Trade Show. Phil and Sarah Hallstedt launched their Northport based sweet cherry business in 2006. They innovated their business model from wholesale to u-pick and the direct shipment of cherries across the country. Hallstedt Homestead joined the conference packed with 200+ vendors, an educational conference, a pitch competition, and networking events with industry partners, such as Meijer.

Product Center data for Leelanau

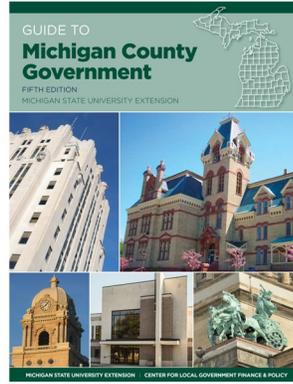
- 15 businesses/entrepreneurs
- 111 of staff time
- 327 total employees
- Over **\$22 million** in combined annual sales
- **One** new project launched

Partnership with Leelanau Planning Department and Housing North

- Developed and participated in webinar on Accessory Dwelling Units (ADUs)
- 90-minute webinar was held May 2023
- 28 participants from the Housing North service area attended webinar live
- Programming lined up for fall 2023 on how a community can prepare for large developments or zoning application for large or controversial developments

County Administrator Resources

County Governance educator John Amrhein served as a resource to Deb Allen with several phone and email conversations as she began her new role as Leelanau County Administrator. Leelanau County is once again participating in the Northern Michigan Counties



125 attendees

Association, an organization of 34 northern lower peninsula counties that meets eight times per year to learn about and discuss issues of particular concern for the area.

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, OMA, the Northern Michigan Children's Assessment Center, and a tour of Camp Grayling.

New Commissioner School (NCS)

For over 50 years, the New Commissioner School 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. Seven commissioners and staff from Leelanau County participated in the 2022 NCS, which included online self-paced learning and

an in-person session with plenty of opportunity for networking with participants from other counties. A new feature this year was round-table discussions, two of which were led by Rob Carson and Yarrow Brown.

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
- Responding to inquiries regarding fisheries education issues in East and West Grand Traverse Bay
- Work with Northwestern Michigan College on freshwater research and outreach
- Assist Fishtown Preservation Society with commercial fisheries management education and assistance

Staff Housed in Leelanau County:

Name	Role	Phone	Email
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