

Grand Traverse County

2014–2015 ANNUAL REPORT



MESSAGE FROM THE DISTRICT COORDINATOR

MSU Extension has been partnering with counties across the state of Michigan for over 100 years. Last year our organization enjoyed celebrating this milestone with our county stakeholders and other key partners commemorating the centennial anniversary of the signing of the Smith Lever Act. Looking back over the past 100 years, our commitment to residents and counties continues to remain the same. We will continue to work within Grand Traverse County addressing critical needs each and every day with individuals, families and communities.



This annual report features the programs offered to Grand Traverse County residents. It highlights our foundational programs like agriculture and 4-H as well as expanding programs like fostering strong communities and health and nutrition education. I think you will be very pleased with the excellent programs provided to residents of Grand Traverse County.

Please let me know if you need additional information on any of the topics covered in this brief overview of our work in 2014. As always, thank you for your continued support of the partnership between MSU Extension and Grand Traverse County.

Sincerely,
Jennifer Berkey, Interim District 3 Coordinator

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MEASURING IMPACT

CONNECTING WITH RESIDENTS

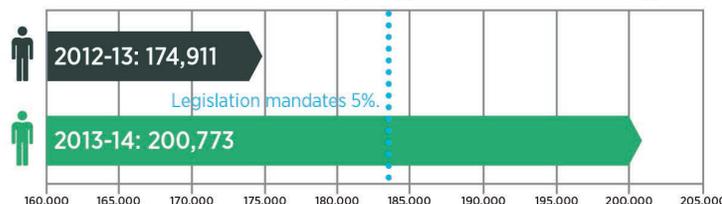
4-H: Developing Youth & Communities	1,536
Keeping People Healthy & Ensuring Safe Food	1,060
Supporting Food & Agriculture	790
Fostering Strong Communities & Businesses while Enhancing Our Natural Assets	1,131
Protecting People from Unintentional Injuries	8,118

2014 TOTAL PARTICIPANTS IN GRAND TRAVERSE COUNTY: 12,635

15% Growth in Adults Participating in MSU Extension Programs



16% Growth in Youth Participating in MSU Extension Programs



MSU Extension's Expanded Digital Reach



2 million visitors viewed more than 4 million pages



560,000 topic newsletters distributed to more than 8,500 email addresses



Nearly 2,000 Facebook and more than 1,700 Twitter followers

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. 4-Hers also demonstrate reduced high-risk behaviors such as drug use, and learn to complete tasks, solve problems and seek any help they might need from peers and adults. 4-H involvement also helps participants avoid or reduce involvement with the court system. This helps ensure more young people succeed in school, attend college and contribute to their communities. More successful young people in communities results in greater tax revenues and consumer spending and increases the likelihood that young people will stay in, or return to, their communities.

The Grand Traverse County 4-H Program empowers youth to change their world!

4-H provides many types of learning experiences that teach life skills such as confidence, leadership and responsibility. 4-H youth develop relationships with caring adult volunteers who provide a safe environment in which to participate in “hands on” learning experiences. 4-H volunteers and parents work together to provide youth with programming that focuses on community service, excellence in education, fairness in competitive activities and the development of skills and abilities that will last a lifetime.

This year 4-H members in Grand Traverse County participated in a variety of learning experiences. Four new clubs were formed, ranging in project areas of health/fitness, rocketry, environmental education, gardening and animal science. Youth had the opportunity to join an archery club, while others learned about leadership, robotics and participated in outdoor activities and community service. A large number of youth worked with animal science education studying horse, steer, llama, alpaca, sheep, pigs, chickens, rabbits and/or dogs. Youth had the opportunity to attend workshops, retreats, and overnight events, such as 4-H Capitol Experience, 4-H Great Lakes Natural Resource Camp, and 4-H Exploration Days.

Outdoor Fun in 4-H: Hiking, canoeing, and winter camping are just some of the fun activities youth participate in through our 4-H Outdoor Adventure club in Kingsley. Over 60 high school youth gain experiences in safety, healthy activities and outdoor survival skills as well as build confidence by participating in this club. Hiking and rock climbing events are just a few exciting activities planned for this club in the future.



When you support MSU Extension 4-H programs, youth participants learn leadership and decision-making skills that increase their likelihood of becoming civically active.



4h.msue.msu.edu

Kingsley's 4-H Outdoor Adventure Club

Developing Youth and Communities, continued



Growing our 4-H Shooting Sports: In January, our 4-H Archery program had over 70 youth participate in this club. In beginner, intermediate and advanced levels of shooting, the youth learned safety, handling of equipment and the skills of archery shooting. This spring our Ready Aim 4-H Shooting Sports Club in Kingsley began meeting with more than 25 youth participating. Youth that attend learn the fundamentals of firearm safety, proper cleaning and handling as well as how to shoot efficiently in the different shooting positions of sitting, off-hand standing, kneeling and the prone position.

Fun Times at this summer's 4-H Exploration Days: Over 80 youth and adult leaders from Grand Traverse County adventured their way through countless amazing activities and sessions during this three-day event on MSU's campus in June. From crafts to biology, sports to science, classes are offered that suit the interests of everybody. During free time, Grand Traverse County youth and adults are treated to behind-the-scenes tours, entertainment and recreational activities, and much more.

It is obvious from the comments of the Exploration Days participants just how valuable this event is. The youth are provided the opportunity to sample college life – a potentially life-changing experience.

“I would definitely recommend Exploration Days to a friend. There is a session to fit everyone's interests and time left over to explore the campus.”

- Exploration Days youth participant



2014 was a record year in 4-H market animal sales, bringing in approximately \$700,000.

4-H at the Fair: Record sales, two auction rings and a new llama and goat barn were some of the highlights from this year's 4-H program at the Northwestern Michigan Fair. This was a record year in 4-H market animal sales, bringing \$100,000 more in sales than 2013. Our 4-H llama and goat project youth enjoyed the new barns to house their animals and this also opened up more room for our poultry barn. We had over 250 swine in 2014 and have seen a general increase in youth participating in 4-H animal projects throughout the three counties at the fair.

Youth in our 4-H animal science programs learn life skills like responsibility, self-discipline, decision making and marketable skills while raising an animal for fair.



Developing Youth and Communities, continued

Cultural Experiences through 4-H:

China Art 4-H Exchange: Thousands of Michigan kindergarten through sixth grade children participated in the 2015 Michigan 4-H Art Exchange with China. As part of the art exchange, the children were asked to paint or draw “visual letters” for Chinese children their own ages. Of those thousands, one hundred pieces were selected to send to China. Artwork entitled “Winter Wonderland” by nine year old Paige Bell from Traverse City was part of that select group. The Michigan children’s artwork sent to China will be exhibited in schools in Shandong Province. The artwork will also be featured on the Michigan 4-H China Art website http://4h.msue.msu.edu/programs/arts/china_project.

A visual letter is like a written letter in that both tell stories, share important ideas and feelings, and connect children regardless of where they live. However, the medium is different in that visual letters use images, written letters use words.

4-H International Exchange: Youth who participate in the 4-H International Exchange program travel to the US to live life as part of an American Family. This past year Grand Traverse County was host to two summer students from Japan and 1 year-long Japanese student. Youth and hosts feel that the experience offers them a bigger world perspective, a cultural education and a “forever” family member! We look forward to welcoming another summer Japanese student in June, and a year-long youth from Korea in August.

4-H Builds Leaders:

After spending eight weeks together as members of the **United Youth Leadership** 4-H program, nine high school students are on track to make great leaders. The 4-H program provided the opportunity for youth to understand the role and purpose of local, state and tribal government through experiential and active learning. They toured tribal and county government facilities, attended Tribal Council and Board of Commissioner meetings and much more. Participants also spent four days in Lansing attending **Michigan 4-H Capitol Experience**. There they attended a legislative breakfast, participated in issue groups, visited with state agencies, lobbyists, and worked on mock legislation at the state capitol.

“I had the opportunity to go to 4-H Capitol Experience this year and I’m so glad I did! I learned so much and had a blast!! I just want to thank everyone who helped make this amazing experience possible! I highly recommend this program to anyone who wants to learn more about Michigan’s government.”
- Participant

Washington DC Bound! This summer three of our United Youth Leadership 4-H graduates will be traveling to Washington DC to take part in the **4-H Citizenship**



9-year-old Paige Bell with her “visual letter” painting that was one of a select few chosen to send to China as part of the art exchange.



Developing Youth and Communities, continued

Washington Focus program for seven days visiting historical sites, senators and representatives as well as learning leadership, responsibility and civic engagement.

Developing Young Entrepreneurs:

Grand Traverse 4-H members raising animals got a lesson in entrepreneurship from the **4-H Career and Workforce Prep** team. Over 180 youth and adults strategized how the 5 P's of marketing - product, price, place, promotion and people - could apply to a 4-H animal project. Youth learned about marketing strategy and how intentional actions on their part could positively impact their standing in the show ring, as well as their earnings at the 4-H auction. A follow-up marketing session was held at the 4-H Explore Educational Expo six months later. The team also created a tool to encourage 4-H members to budget and save the money they earn at the 4-H animal auction. That form, called "Invest Wisely" is now included with the auction check of over 500 4-H members who raise and sell an animal at the auction.

4-H Growing with New Ideas and Collaborations:

Explore 4-H Educational Expo: More than 150 4-H youth, leaders and families from our area and around the state attended the Explore 4-H Educational Expo at the NW Michigan Fairgrounds. 4-H Explore was an opportunity for 4-H'ers and their families to learn from a wide range of speakers on nutrition, fitting and showing of livestock animals such as swine, cattle, goats, horses, etc. Traverse City State Bank offered two classes on marketing, Ebels Meats taught classes on processing, others learned from MSU leaders on parliamentary procedure, zoonotics, youth/adult partnerships and storyboard/website development. It was a great weekend of 4-H experiential learning for everyone involved!



Clover Market Farm at State Parks: 4-H is teaming up with Michigan's Department of Natural Resources to bring farm markets to local state parks in our area. The purpose of this project is to promote a healthy diet while camping at the state parks. During three days this summer, 4-H clubs will be selling locally grown produce at Interlochen and Traverse City State Parks. This is a great entrepreneurial opportunity for youth to learn about buying, selling and marketing of their produce. This is also a great project for 4-H'ers to share healthy eating, promote our area's great fresh produce, raise funds and share with people what 4-H is all about!

Environmental Science and Gardening: Grand Traverse 4-H has teamed up with Willow Hill Elementary afterschool and summer camp program to offer a 4-H club on environmental science and gardening once a week this spring and summer. Plans include offering speakers on entomology and forestry as well as gardening, water science and crafts.

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.

Teaching valuable healthy-eating skills

The Supplemental Nutrition Assistance Program – Education (SNAP-Ed) provides nutrition education to income-eligible adults and children. This program focuses on improving dietary quality and increasing physical activity while stretching food dollars. The ultimate goal of these programs is to promote healthy weight maintenance and obesity prevention. During the past year in Grand Traverse County, 397 adults and 485 youth were reached through nutrition education classes at various venues in the county.

One of the many classes MSU Extension staff teach each year is through a partnership called **Project FRESH**. In collaboration with the Grand Traverse County Health Department, MSU Extension nutrition staff provide nutrition education to families involved in the Women, Infants and Children program (WIC) on the benefits of including more fruits and vegetables in their diet. Coupons were provided to these participants to purchase locally grown fresh fruit and vegetables from Grand Traverse County farmer's markets through Project FRESH. These coupons were redeemed at the farm market for over \$6,000 in funds for produce grown by local farmers.

Nutrition education classes make a difference in lives of adults and youth in Grand Traverse County! Here are a few impacts achieved through the MSU Extension nutrition education classes:

Impacts with Adults:

- » 83% showed improvement in one or more nutrition practice like planning meals, making healthy food choices or reading food labels.
- » 74% showed improvement in one or more food resource management practice like planning meals, comparing prices or using grocery lists.
- » 95% of participants in Project FRESH will eat more fresh fruits & vegetables per day.
- » 92% of participants in Project FRESH learned new ways to incorporate more fruit and vegetables into their meals and snacks.

“One adult participant stated that his mom was thrilled when he made the recipe from class for dinner the next night. He was very proud that he could cook a healthy low budget meal for his hard working mom.”

**~ Michelle Smith,
Nutrition Program
Instructor**



Coupons were redeemed at Grand Traverse County farm markets for over \$6,000 in funds for produce grown by local farmers.

Keeping People Healthy, continued



Impacts with Youth:

- » 94% of the teachers reported that the children increased in their awareness of the importance of good nutrition.
- » 69% reported that the children were making healthier meal and snack choices.
- » 84% reported that the children were willing to try new foods.
- » 73% reported that the children were eating more fruits.
- » 67% reported that the children were eating more vegetables.



Many of the teen participants were surprised to see how many teaspoons of sugar were in a 20 ounce bottle of pop. Many of them told me after class. "I am going to cut down on the amount of pop I drink a day!" "I can't believe all that sugar is hidden in this one bottle of pop!"

One teen stated that she liked the Cooking Matters series so much that she may look into a career as a chef after high school.

- Michelle Smith , MSUE Nutrition Program Instructor

Teaching residents about food safety

Supporting MSU Extension food safety education programs helps prevent food borne illnesses and ensures a safer food supply for consumers – whether that is at food retailers, restaurants, farmers' markets or community meals served by organizations. MSU Extension food safety education programs train participants to prevent incidents of foodborne illness associated with unsafe food handling practices, which results in fewer medical expenses, fewer food recalls, and less temporary or permanent closures of food businesses by local health departments. Costs of illness, recalls, and food business closures are more expensive from a public health perspective than taking an inexpensive class to learn how to prepare food safely and preserve food correctly. Residents in Grand Traverse County participated in a variety of food safety classes.

Grand Traverse County residents indicated that as a result of attending food presentation workshops:

- » 96% will follow research based/tested recipes when canning food at home.
- » 97% will properly use processing techniques to safely can low and high acid foods.
- » 98% will use correct processing times to safely can low and high acid foods.

Jennifer Berkey's
MSUE News Articles

As a result of MSU Extension food safety programs, individuals now use safer food handling, preparation, storage and preservation techniques.



Keeping People Healthy, continued

Working to improve social and emotional health

MSU Extension addresses violence and bullying prevention through its focus on social and emotional health, with the overarching goal of helping young people and adults learn to foster safe, affirming and inclusive relationships and settings that are free from violence, abuse, bullying and harassment. This benefits communities through decreased mental, emotional, social and economic costs associated with violence in communities. During 2014, MSU Extension's social and emotional health educational programs reached a total of 3,756 participants statewide.

MSU Extension played a vital role, in conjunction with the Anti-Bullying Taskforce, in planning, recruiting/promoting, and collecting registration for the **3rd Annual Antibullying Conference** held October 17, 2014 at the Hagerty Center in Traverse City. Over 200 adults and 200 students from 20 schools across the Traverse Bay Area ISD and Manistee ISD regions participated in the conference. This year's featured presenters came from the *Not in Our Town/Not in Our School* movement. Partners in the Anti-Bullying Taskforce include Michigan Department of Civil Rights, Northwestern Michigan College, Disability Network of Northern Michigan, TBA ISD, Michigan State Police Troopers Association, Women's Resource Center, Third Level and TCAPS.

Be SAFE: Safe, Affirming and Fair Environments is an MSU Extension initiative designed to offer a variety of educational resources to help communities reduce and prevent bullying behaviors while promoting healthy social and emotional learning and development. The Be SAFE curriculum includes more than 30 engaging and experiential activities designed for adults to use with adolescents ages 11 to 14 in middle schools and in a variety of out-of-school group settings, such as 4-H, afterschool programs, Boys and Girls Clubs, Scouts and faith-based programs. MSU Extension provides workshops about how to use the curriculum, as well as evaluation support for groups interested in identifying the impacts of using the curriculum within their settings.

Be SAFE participants this year indicated that they developed new ways to take care of themselves as a result of what they had learned, as well as new ways to provide support for those who are being bullied. Several also indicated that they had seen positive changes in their group as a result of their involvement with Be SAFE.

"I feel that the Be SAFE curriculum has opened the lines of communications. Students now know more than ever that the adults are here for them! They feel more comfortable. Be SAFE has affected bullying issues in our group by bringing more awareness to the issue. It has opened our students' minds to different ways they can help. Overall, we are very pleased with the Be SAFE curriculum and look forward to seeing what next year's club does with it!" - Adult working with Be SAFE group





Keeping People Healthy, continued

Preventing and managing chronic disease

Chronic diseases are among the most prevalent, costly, and preventable of all health issues. Compared to the national average, Michigan adults suffer from more risk factors (obesity, hypertension, and high cholesterol) that contribute to chronic disease. In 2010, the estimated cost of diabetes in MI was \$7.2 billion. This figure is expected to triple over the next 25 years. Michigan can save an estimated \$545 million spent across all chronic diseases by investing \$10 in preventive care per person per year.

MSU Extension's **Disease Prevention and Management (DPM)** programs work to promote health and wellness by reducing and managing the incidence and impacts of chronic diseases among Michigan residents and communities. These community-based sessions provide participants with proven strategies for improved dietary quality, management of chronic health conditions and prevention of chronic diseases, such as type 2 diabetes. Through participation in MSU Extension's multisession disease prevention and management programs, participants have shown increased consumption of healthier food choices, increased physical activity, improved self-rated health scores, reduced chronic disease symptoms and increased confidence in management of chronic health conditions. In 2014, these programs reached more than 6,000 adults throughout Michigan.

According to the most recent Community Health Needs Assessment, obesity and diabetes management/prevention were identified as a top priority among stakeholders in the five county northwestern Michigan region. In addition, findings from a regional study investigating community food security, type 2 diabetes was the most common health issue cited by residents who rely on food pantries to help meet their food needs.

MSU Extension DPM works in partnership with community organizations to address health needs and educational program delivery. **The Food, Farms, and Health Conference** serves as one example of this partnership in practice. This action-oriented conference was organized in partnership with MSUE DPM, Munson Healthcare, Hagerty Insurance, and the Michigan Land Use Institute, and took place in Kirkbride Hall at the Grand Traverse Commons. Over 120 food, farm and health leaders from the NW MI region and state converged to learn, connect and take action on integrating regional food with health care and wellness.

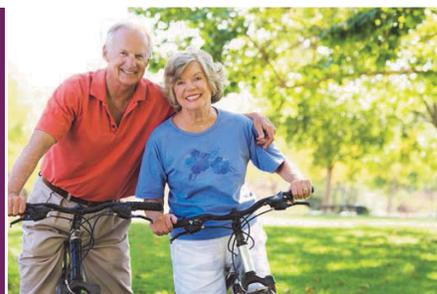


Keeping People Healthy, continued

Personal Action Towards Health (PATH) provides the skills and tools to manage chronic health conditions. People who participate in PATH workshops are better equipped to face the daily challenges of living with one or more chronic conditions. Through PATH, participants learn to deal with the challenges of not feeling well, talk to healthcare providers and family members, overcome stress and relax, increase their energy, handle everyday activities more easily, stay independent and set goals. In addition to PATH workshops focused specifically on diabetes and on chronic pain, Grand Traverse County MSUE hosted **PATH Leader Trainings** in partnership with the Area Agency on Aging of Northwest Michigan.

The Geriatric Education Center of Michigan (GECM) community team in Traverse City is comprised of MSU Extension educators as well as leaders from the Traverse Health Clinic, the Area Agency on Aging, and the Alzheimer's Association. GECM has focused their local training efforts to support the federally-recognized Michigan tribal health clinics by offering interdisciplinary health professionals training on health issues specific to older adults (elders). Trainings include early detection and management of dementia in primary care, falls prevention, depression in older adults, mental health and substance abuse, nutrition, oral health, and many others. Professional continuing education units, (CE and CME) were offered at each training. Since the beginning of the GECM team in Traverse City, we have provided four day-long trainings to health care professionals and elder care workers, as well as behavioral health, police and tribal court professionals who are members of the Grand Traverse Band of Ottawa and Chippewa Indians.

Extension Health Research is a partnership between MSU Extension and the MSU College of Human Medicine (CHM). CHM research faculty conducting community-based, externally funded research need community linkages, recruitment support and dissemination expertise, and MSU Extension is positioned to provide this support. Extension Health Research educators implement community-based approaches in six regional clinics throughout the state, including one in Traverse City. Extension educators add to the interdisciplinary efforts needed for community engaged research. They understand and can prioritize health needs in communities, educate audiences, and train leaders. They also facilitate networking with state health departments, federally qualified health centers, local health care providers and health-related organizations, resulting in mutually beneficial public-private partnerships with the objective of improving health outcomes for the citizens of Michigan.





SUPPORTING FOOD AND AGRICULTURE

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

Michigan agriculture continues to be a growing segment of the state's economy. When you support MSU Extension, you help participants learn profitable and efficient business and production practices. Participants also learn how to optimize and reduce the use of pesticides and fertilizers, and how to conserve and protect water resources. This education leads to better use of time, money and human capital, and helps retain and create agricultural jobs. These measures strengthen Michigan's economy while connecting farmers to local food opportunities and global markets. In this way you help MSU Extension encourage growth in a sustainable and prosperous Michigan food and agriculture system.

Farm Transition program: Forty-five farm business owners in Grand Traverse County attended three half-day workshops that took them through the steps to plan transitioning the farm business to a family successor, a non-family successor, or selling and retiring. Presenters included MSUE farm business management specialists and an attorney specializing in business succession. They were available at no charge each afternoon to meet one-on-one with families to answer additional questions.

Fruit Production

Northwest Michigan Horticultural Research Center staff and the MSU fruit team hosted the **Great Lakes Fruit Workers conference** in Traverse City. The meeting's location rotates among cities in Michigan, New York and Ontario, allowing host states to highlight their fruit growing regions, and to provide the GLFW with first-hand experiences on regional challenges in fruit production. Comprised of researchers, Extension educators and consultants, the GLFW is tasked with: identifying crop management priorities for fruit producers, fostering collaborations between Great Lakes researchers, Extension educators, and growers, developing innovative crop management techniques, and sharing new integrated pest management technologies, management guides, pest alert systems and outreach efforts that result from these collaborations.

Northwest Michigan Orchard & Vineyard Show: The January 2015 show was very well attended with over 320 registrations. Sessions covered a broad range of topics pertinent to tree fruit, grape and saskatoon berry production. The wine grape educational session was very well attended as was the saskatoon session.

Great Lakes Fruit & Vegetable Expo: MSUE educators from northwest Michigan are involved in the planning and facilitation of this annual December event held in Grand Rapids. Many northwest Michigan growers attend to obtain information and make contacts that benefit their farming operations.

Supporting Food and Agriculture, continued

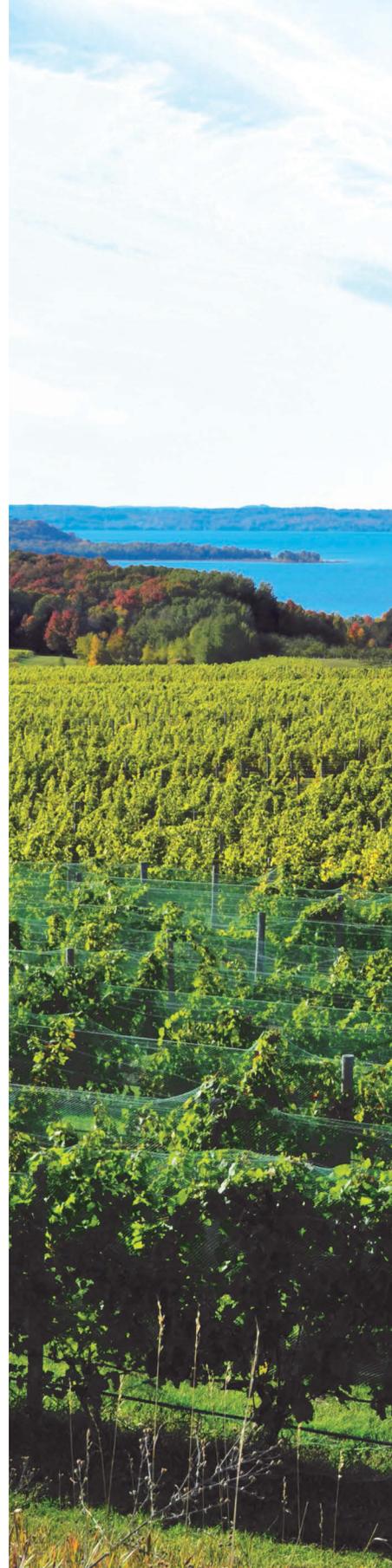
Precision Orchard Management Workshop – At this interactive workshop, MSU tree fruit experts demonstrated pruning techniques for high-density sweet cherries at grower farms and the Northwest Michigan Horticultural Research Center (NWMHRC) and demonstrated precision orchard management techniques in high-density apples. Precision management includes several management practices, such as pruning, thinning, fertilizing, irrigating and harvest timing, as all of these decisions will affect fruit size and crop value.

The 2014 **Tree Fruit IPM (Integrated Pest Management)** kick-off event in April hosted tree fruit growers from NW MI and started off the season's IPM educational seminar series. Weekly Tree Fruit IPM Update meetings provided assistance and services from MSU Extension to tree fruit growers over the course of the 2014 season.

Extension's response to cold injury in area vineyards: Following the severe cold injury to grapevines in the Grand Traverse region due to the 2014 “polar vortex” weather events, numerous reports, articles, radio and television interviews and other form of communication were used to educate growers about vine recovery strategies and keep the public informed about the health of the local wine industry. Unfortunately, we are going through all of this again in 2015 due to winter cold and a severe frost on May 20th. A technical, comparative tasting of wines made from super cold-hardy grape varieties was held in April, to expose the growers and winemakers of our area to alternative wine grape varieties .

Grape Research & Demonstration Projects: Grape variety trials and growing practices research continued in 2014. The severe cold in the winters of 2014 and 2015 caused extensive injury to grape buds; research and demonstration activity related to vine recovery strategies are being investigated and demonstrated at the Northwest Michigan Horticultural Research Center. Students in the Viticulture and Enology Science & Teaching Alliance (VESTA) received many hours of hands-on experience in the experimental vineyard.

Weathering the Climate: Cultivation and Technology in Grape Production Conference: This program came out of a new collaborative effort between MSU Extension, MSU's Institute of Applied Technology and Northwestern Michigan College. It featured experts in agricultural technology, geography, horticulture, and unmanned aerial systems. Over 90 participants attended the full-day program that included lectures, grower panel discussions and vineyard demonstrations.



Weathering the Climate Conference attendees explored potential uses for drones in grape production.

[Duke Elsner's MSUE News Articles](#)

Supporting Food and Agriculture, continued

MSU Extension is working to help hops producers meet the exciting challenges of supplying craft brewers with a high-quality product. This rapidly growing industry, made up of dedicated small business owners, is improving the economy and instilling a sense of local pride in the region.

Hops Production

MSU Extension continues to provide valuable education offerings each year to support emerging hops producers in the Grand Traverse Region. This exploding industry has seen growth from a 1.5 acre commercial hop yard on Old Mission in 2009 to at least 40 acres in Grand Traverse County. These 40 acres represent an investment of at least \$600,000 in infrastructure costs alone, not including land costs. Construction is underway for a 400 acre hop yard and processing facility near Williamsburg, which should be operational in 2015-16. Investment in this hop yard and adjoining processing facility is likely to be over \$5 million. Conservative estimates for sales of local hops is approaching \$500,000 a year in the active hop yards in Grand Traverse County.

This rapid exponential growth is fueled by recent hop shortages, the growing appeal of specialty beers and the desire for organic and locally sourced agricultural products. MSU Extension has taken the lead by providing valuable research and outreach to these new growers on best practices for planting, harvesting and pest management.

Horticultural Research Efforts

The **Northwest Michigan Horticultural Research Center (NWMHRC)** was awarded approximately \$250,000 from granting agencies that supported on-farm tree fruit horticulture and pest management related research. Several of these projects were conducted in collaboration with local tree fruit grower cooperators and the NWMHRC, MSU Extension, and MSU AgBioResearch; research included on-farm monitoring/trapping programs of pest species to facilitate early detection and effective management programs, and pest and disease management trials. Projects also include pollination in tree fruits, apple and cherry diseases, pruning and training, systems management, irrigation, and various other trials.

A summit was held by MSUE at the NWMHRC to solicit industry input on research and outreach needed to successfully manage **Spotted wing Drosophila (SWD)**, an invasive insect pest that poses serious threats to Michigan's fruit production. SWD populations have increased dramatically in many fruit crops across the state, including cherries, and a sustainable and effective management plan is the top priority of the Michigan Cherry Committee. Six grant proposals were developed based on priorities set by this summit.

Working together to eliminate invasive species will be essential to lessen the loss of the Michigan tree fruit crops in the future.



hops.msu.edu



Collecting pollinators for identification.

NWMHRC:
agbioresearch.msu.edu/centers/nwmihort

Supporting Food and Agriculture, continued

Home Horticulture

The MSU Extension **Master Gardener Program** annually certifies our community's Master Gardeners who have completed both horticultural training and volunteer commitments. In fall of 2014, twenty-nine Grand Traverse County residents were enrolled and passed the Master Gardener educational core training class. These participants are now tasked to serve the public in a community, horticulture-education related way. In 2014, our existing Grand Traverse County Master Gardeners served a combined 3,128 hours. These projects span across the county to include work at the Boardman River Nature Center Gardens (173 hours), the TC Historic Barns Park Master Gardener Demonstration Garden (41 hours), and the Mission Peninsula Library (25 hours) – to name a few.

Consumer horticulture assistance was provided over the phone by Master Gardener Volunteers through MSU Extension's **Gardening Hotline** at 1-888-MSUE-4-MI . Volunteers are extensively trained by MSU educators and are available 5 days a week to help homeowners' with their lawn & garden inquiries. The hotline received 99 calls from Grand Traverse County residents this year.

Master Gardener Volunteers assisted more than 100 home owners, gardeners and landscapers with pest identification and management, growing tips, and various other inquiries during our free weekly walk-in **Diagnostic Clinics** May through September.

Agriculture Labor Management

MSU Extension partners with Farm Bureau, Immigration and Customs Enforcement (ICE), Migrant Legal Services, Workforce Development Agency, Migrant Resource Councils, other agencies involved in agricultural labor, and grower representatives to coordinate agricultural labor management meetings across the state. Programs were held in Traverse City, Lawrence, West Olive and Hart. The programs are designed to address areas of concern identified by producers.

The **Effective Management of Farm Employees** program was delivered in various places across the state by MSU Extension educators Stan Moore and Phil Durst. Attendees received researched based information on how to improve their labor management skills in four specific areas of labor management: attracting good applicants, building better teamwork, capitalizing on the employees' desire to learn, and achieving high quality performance. 130 growers attended this program as part of a breakout session at the Fruit and Vegetable EXPO in Grand Rapids. Moore and Durst also developed and delivered a DaireXNET Webinar on Effective Management of Farm Employees, and presented a session at the Midwest Women in Ag Conference, hosted by Purdue University in Merrillville Indiana.



Farm Information
Resource
Management:
firm.msue.msu.edu

Smart Gardening in
Michigan:
migarden.msu.edu



Supporting Food and Agriculture, continued

Dairy Production

Michigan State University Extension offered 11 meetings across the state in September 2014 to help dairy producers evaluate the impact of the new **Dairy Margin Protection Program** (part of the new 2014 Farm Bill) on their farm businesses. An additional three meetings were held in November 2014, including one live webcast. Dairy producers learned what the Dairy Margin Protection Program is and how it will work, saw a demonstration of the online Dairy Decision Tool Software, and learned about the potential impacts on farm profitability. Dr. Christopher Wolf, MSU Dairy Economist, along with MSU Extension Dairy Educators and Farm Management Educators, taught these 2-hour workshops. USDA Farm Services Agency personnel were also present at the meetings to help answer questions.

Dairy producers, dairy farm employees, and industry professionals received timely updates about topics important to managing today's dairy farms at the **Focus on Dairy Production** meetings offered across the state by the MSU Extension Dairy Team. Local veterinarians discussed the importance of colostrum management and calf health and their ultimate impact on the profit potential of the milking herd. Participants also gained knowledge about the prevalence of the bovine leukemia virus and how to minimize the disease in their dairy herds. During the afternoon portion of the meeting, dairy producers learned about keys to maximizing milk yield when using increased levels of corn silage in dairy cow diets. Animal handling tips for employee training programs also were shared with the audience. The final topics of the program were best management practices for manure handling during the winter and key components of an emergency response to manure spills. Approximately 60% of the people who completed the post-meeting survey planned to make from 1 to 3 management changes on their farms. They estimated the value of those changes would be over \$365,000.

The Artisan Hands-On Basic Cheese Making Workshop is a three day workshop for those who have never made cheese before and those who want to improve their skills in order to enter the cheese business. Participants learned about milk quality, ingredients, processes for making a variety of cheeses, techniques and requirements for aging cheese and planning to establish a farmstead or artisan cheese business. Speakers included Dr. John Partridge, Bill Robb, and Barb Jenness and Stan Moore. The workshop takes place at MSU's Dairy Plant and utilizes their equipment and employees to make the project "real world". 20 people participated in this year's class. One individual reported starting a new business and three other class members indicated interest in starting a business.

dairyteam.msu.edu



[Stan Moore's
MSUE News Articles](#)

FOSTERING STRONG COMMUNITIES & BUSINESSES

Cultivating entrepreneurs

With over 1,000 attendees annually, the **Northern Michigan Small Farm Conference** has become the preeminent small farm conference in Michigan, providing education and resources for small and mid-scale growers in the post-20th century world of Agriculture.

From Joel Salatin, the Conference's first keynote speaker and self-proclaimed 'environmentalist, capitalist and lunatic farmer'...to Jeff Moyer, Elliot Coleman, Percy Schmeiser, Fred Kirschenmann, and Winona LaDuke, the Conference has featured the country's leading growers, researchers and engaged citizen/eaters that have questioned the long-term sustainability of the industrial food system and are providing promising alternatives. The Conference planning team, which is now comprised of a collaboration of growers, University, and community partners, continues its pursuit of cutting edge practices and practitioners. By focusing on the ecological, economic and social aspects of more community based food-systems, scores of viable, triple-bottom line businesses have been started and thousands more report the changes that they have or will make as a result of something learned at the Conference.

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 MSUE office or the client's home or business location. The assistance provided is tailored to meet the needs of the client and may include things like developing a business plan, navigating the regulatory maze, accessing the supply chain or seeking funding options. The innovation counselor also assists clients in accessing specialized services they may need that are offered through Michigan State University like feasibility studies, nutritional labeling and packaging assistance.

Two hundred and thirty-eight counseling sessions took place in Grand Traverse County to assist forty-two entrepreneurs. Two new ventures were launched and thirteen jobs were created. An increase of \$1,040,000 was reported in sales. \$6,240,000 of investment was made in the County by these local businesses.

Many specialty food processors were connected with MSU services on campus where they received assistance with food safety, product classification and labeling. The partnership between MSUE and the MSU Product Center Food-Ag-Bio is providing support for entrepreneurs in supporting economic development across northwest MI.

When you support MSU Extension, you help participants understand the economic, environmental and social benefits of purchasing local and regional foods.

2014 Product Center impacts in Grand Traverse County:

- 2 ventures launched
- 13 jobs created
- \$1M+ sales increase
- \$6.2M+ investments

smallfarmconference.org

productcenter.msu.edu



Fostering Strong Communities, continued

Strengthening municipalities

Northern Michigan Counties Association brings county commissioners together to share information and learn about issues important to county government. Recent topics include: cooperative efforts between counties, townships, road commissions, agencies and private owners; tribal sovereignty and cooperative efforts with counties; county committee structures; Medicaid PIHP and regional entities; personal property tax and transportation and the impacts of these issues on county government services. Meetings also include a legislative update from the Michigan Association of Counties.

New County Commissioner Workshops: Since 1968, MSU Extension, in partnership with the Michigan Association of Counties, has conducted the New County Commissioner Workshops following the biennial election of commissioners. The program offers information and learning opportunities on county structure and process, budgeting and finance, county administration, courts, and more.

Michigan's Open Meetings and Freedom of Information Acts were the topics of workshops for the board and key staff of Northern Lakes Community Mental Health. The sessions included answers to several specific questions submitted ahead of the workshops, and were attended by board members from Crawford, Grand Traverse, Missaukee, and Wexford Counties.

Effective meetings, parliamentary procedure, techniques for reaching consensus, and behaviors to build trust were discussed by participants in a day-long preconference session at the **2014 Michigan Townships Association Annual Conference** held in Acme. Township officials from 17 counties participated.

Zoning Administrator Certification: A zoning administrator is often the first or only contact a developer or new business has with local government. That makes the zoning administrator important to a community's development and its public image. This series of eight 3-hour classes cover the technical, legal, pragmatic and organizational aspects of zoning administration. Marvin Radtke of the Village of Kingsley and Loyd Morris of Long Lake Township participated in this rigorous program and passed, making them Certified Zoning Administrators.

MSU Extension educators also held the following **Government & Public Policy trainings** in and around Grand Traverse County this year:

- » Streamlining Zoning – training on ways to make zoning ordinances easier to understand and follow.
- » Placemaking training and strategic planning.
- » Webinar trainings on a wide variety of topics including right to farm act, wireless communications and urban design.

Fostering Strong Communities, continued

Engaging communities through facilitative leadership

MSU Extension educators worked with the University of Michigan to facilitate local community discussions as part of a study, “[Deliberative Engagement of Communities in Decisions about Research Spending](#).” The discussions they facilitated took place throughout Northern Michigan, where the CHAT program was delivered. [CHAT \(Choosing Health All Together\)](#) is a serious game designed to be inclusive, informative and engaging. The goal is to promote deliberation and dialog about complex and value-laden health research spending decisions. CHAT was designed so community members could provide input for funding decisions, usually related to health, health care or health research. CHAT depicts spending options as layered wedges on a pie chart. Higher levels of health care research cost more. Participants have 50 markers to spend on various options; there are not enough markers to fund all research levels. Thus, participants must set priorities for the use of limited resources. Participants do this individually, selecting options for themselves and their family as well as in a group, where they make choices for their community.

[Honoring our Children Initiative](#) - MSU Extension continued efforts this year in [engaging Tribal Leaders and Tribal Citizens](#) in creating a plan to improve factors important to the well-being of Tribal Children, ages 0-8. This includes quality education, safe communities, and good health. This initiative is in partnership with the Inter-Tribal Council of Michigan and is financially supported by the W.K. Kellogg Foundation. MSU Extension workshop sessions offer participants an opportunity to practice new skills in leading a group discussion, reaching consensus, encouraging creativity, setting outcome-based goals for meetings, keeping a group focused and creating action plans.

[A Comprehensive Grass Roots Approach to Community Development](#) six-day training was offered to Michigan residents and Tribal Nations to teach participants skills to launch and sustain projects, ensure effective grass roots participation, map assets and relationships of a whole community, empower and motivate community partners and groups to action, develop creative strategies and do-able projects, balance implementation with celebration and organize participatory evaluation.

Other Michigan Tribal Governance efforts included:

- » Training Michigan’s Healthcare Professionals at Tribal Health Clinics
- » 4-H Tribal Youth Leadership
- » Building Strong Sovereign Nations (BSSN: Anishinaabek Leadership for Seven Generations)
- » Good Governance Trainings



MSU Extension’s tribal governance programs seek to establish sustainable partnerships with tribal nations, tribal organizations, and county governments across Michigan.

[Bethany Prykucki’s](#)
[MSUE News Articles](#)

[Emily Proctor’s](#)
[MSUE News Articles](#)

MAKING THE MOST OF OUR NATURAL ASSETS

Better land stewardship benefits communities by protecting and enhancing Michigan's natural resource assets.

When you support MSU Extension's natural resources education programs, participants learn about income-generating opportunities, ecological principles, natural resource issues and the role of natural resource professionals. They also explore public policy issues related to environmental stewardship. Our programs can lead to increased income for families that retain their natural resource assets, help landowners become better stewards of their land, and protect land management opportunities for future generations. Better land stewardship benefits communities by protecting and enhancing Michigan's natural resource assets.

Wildfire Prevention

Elaine Bush, Extension educator, and Jed Jaworski, Firewise field assistant, provided wildfire prevention education in Grand Traverse County as well as several neighboring counties. Programming during 2014 included:

Firewise on the Farm (FOTF) exhibits and handouts were presented at agricultural safety workshops held in Cadillac, Ludington, Manistee, the Northwest Michigan Horticulture Research Center, and at the annual statewide Farm Bureau meeting in Grand Rapids. FOTF educational displays, handouts, and presentations were also provided for growers at the northern Michigan Small Farm Conference, a North Central Michigan College community education session, and at the Northern Michigan Orchard & Vineyard Show.

Firewise zoning workshops were offered during 2014. Twenty local officials received three Master Citizen Planner credits for attending a 3-hour session co-taught by Elaine Bush and Extension colleague Kurt Schindler. One hour sessions were conducted by Bush and Extension colleague Brad Neumann at the Michigan Township Association (MTA) annual conference at the Grand Traverse Resort and the National Association of Community Development Extension Professionals (NACDEP) annual conference in Grand Rapids. Jaworski provided wildfire response training to 125 Community Emergency Response team (CERT) members from all over Michigan meeting in Grayling.

Jaworski and MDNR wildfire specialist Dan Laux provided an exhibit and educational handouts at the Northern Michigan Fire Chief Association conference in Petoskey and Michigan Emergency Management Association conference in Traverse City. The newest MSU Extension Firewise bulletin, E3203 *Protect Your Great Lakes Shoreline Home from Wildfires* was distributed to property owners in 2014.

firewise.msu.edu

[Elaine Bush's
MSUE News Articles](#)

Making the Most of Our Natural Assets, continued

Enhancing & protecting our Great Lakes coastal resources

Through research, education and outreach, **Michigan Sea Grant** is dedicated to the protection and sustainable use of the Great Lakes and coastal resources. Sea Grant staff engage partners on projects designed to foster science-based decisions that promote vibrant, livable communities that offer opportunities for economic growth while preserving our natural resources.



Michigan Sea Grant co-hosted the **7th annual Freshwater Summit** at the NMC Great Lakes Hagerty Center. District Sea Grant Educator Mark Brederland gave lake levels rebound talk to sold-out crowd of 175. Other topics covered included a sea lamprey update, Boardman River dams update and keynote from the DEQ office of the Great Lakes.

Rebounding water levels in Grand Traverse Bay from late 2012 to 2014.

Educator Mark Brederland presented to the **Michigan Fish Producers Association** on lake levels, fisheries updates etc., and to the US Army Corps of Engineers on the Asian Carp/ Great Lakes Interbasin Study in January 2014.

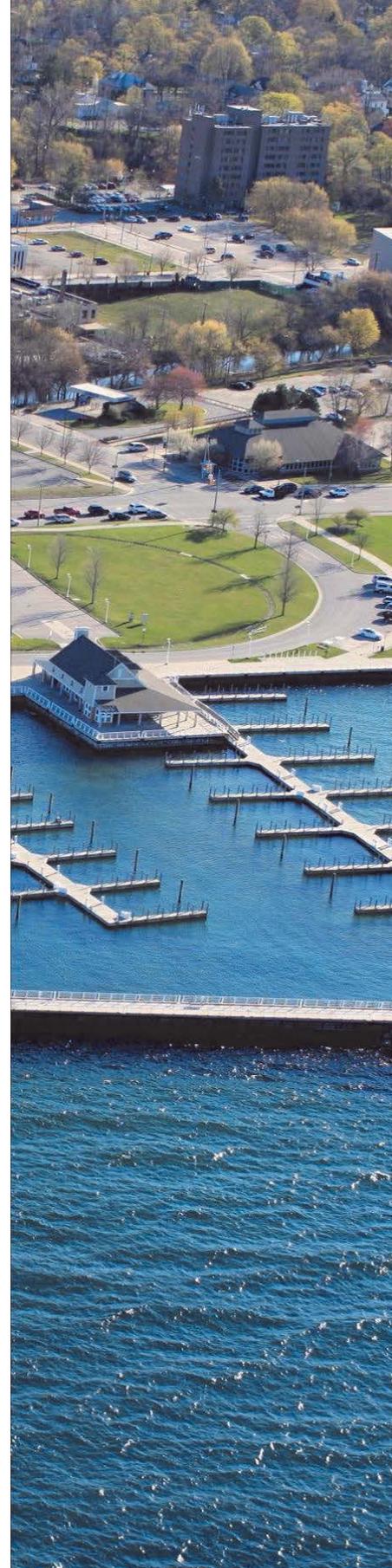
Other projects this year included working with Elmwood Township on the waterfront corridor and City of Traverse City on possible fishing / public pier, talking with Grand Traverse County marinas on participation in the Clean Marina program, and participation with the **Northwest Michigan Water Safety Network** on water safety equipment and best practices for swimming safety in Great Lakes beaches.

Michigan Sea Grant also recently launched the **Be Current Smart** regional campaign with the goal of creating awareness of potentially deadly Great Lakes currents. Supported by the National Oceanic and Atmospheric Administration, the campaign includes a central website with animated messages and tips for parents, social media components, and video interviews with U.S. Coast Guard, county sheriffs and park officials to communicate key threats to swimmers, including high waves, dangerous structures (e.g., piers), dangerous currents, and promoting the use of water safety and emergency rescue equipment.

MSUE's Sea Grant Educator Mark Brederland and Injury Prevention Coordinator Jennifer Ritter both serve as members of the Northwest MI Water Safety Network.



Michigan Sea Grant:
miseagrant.umich.edu



PROTECTING PEOPLE FROM UNINTENTIONAL INJURIES

Safe Kids North Shore is one of over 400 unintentional injury prevention coalitions under Safe Kids Worldwide. Since Safe Kids was founded in 1988, there has been a 60% reduction in unintentional injuries to children age 19 and younger nationwide.



SAFE
K:IDS
NORTH SHORE

Safe Kids North Shore:
gtinjuryprevention.com

Safe Kids North Shore is in the middle of its 15th year of providing injury prevention focused education and programming to the residents of Grand Traverse County. In addition, we are beginning our 9th year of programming through a continued partnership between MSU Extension and Munson Trauma Services. Safe Kids North Shore uses research and programs developed by Safe Kids Worldwide to provide education and programs to the Grand Traverse community.

Our programming is carried out through several partnerships that encompass many different areas and ages of injury prevention. We lead the **Grand Traverse Region Injury Prevention Network**, which brings area agencies and their experts together to address injury prevention programming across the lifespan. Through our partnership with Grand Traverse Metro Fire and their Risk Watch program, education and presentations are taken into the Traverse City Area Public schools monthly. In addition, through our partnership with Munson Healthcare, we oversee the **Kohl's 4 Season Safety** program, providing head and sports injury prevention programming with funds made available to the hospital through Kohl's Cares.

Following are some highlights of 2014 programming:

- Direct contact injury prevention programming to over 8,100 persons.
- Indirect contact was made to over 4,500 individuals through flyers and brochures distributed at events, doctor offices, urgent care, emergency room, etc.
- Approximately 1,100 safety related devices such as car seats, bike/multi-sport helmets, personal floatation devices, reflective pedestrian zipper pulls and reflective helmet stickers were distributed throughout the community.
- Safety devices distributed totaled over \$9,300, all made available through either Safe Kids Worldwide or secured through state grants.
- Over 600 volunteer or in-kind hours were spent on direct-contact injury prevention programming.

Child passenger safety: Safe Kids North Shore continues to oversee and provide required certification education and skills assessments to approximately 40 Certified Child Passenger Safety Technicians from both the Grand Traverse region and northwestern Michigan. A grant was secured from the Office of Highway and Safety Planning and in November Safe Kids North Shore held a 1 day, 6 credit CEU class for local Child Passenger Safety Technicians (CPST's). The 6 CEU's are mandatory for CPST's to obtain to maintain their certification.



Certified Child Passenger Safety Technicians work hard reviewing new information learned at their yearly CEU Update Class.



Protecting People from Injuries, continued

Car seat inspection stations continue to be held on the 2nd and 4th Friday of each month. Inspections are hosted on site at the Grand Traverse County Sheriff's Office Correctional Facility Garage and at Grand Traverse Metro Fire Station #11 so that the service can be provided year round regardless of weather. Over 300 car seat inspections were performed this year through these stations, at community events and through one-on-one appointments. In addition, more than 80 car seats were distributed along with a half hour education session to caregivers of children who were in need of a seat.

Referrals are made to Safe Kids North Shore through Health Department nurses of families participating in Maternal Infant Health program or through Prevention/Protection case workers of the Department of Human Services. These seats are obtained through a grant from the Office of Highway and Safety Planning.



Not all seats work the same, and not all seats fit in every vehicle. This is a field that is ever-changing, so education is vital.

In and Around Cars continued to be taught at the Traverse City Area Public Schools and Kingsley school that participate in Risk Watch, as well as at local community and health events. This program is a multi-station program that is taught along with partners from both the Grand Traverse County Sheriff's Office as well as the Michigan State Police. Students rotate through stations and get hands on experience learning about proper seat belt fit and what can happen when it is worn incorrectly, reasons behind booster seat use, the dangers of being behind vehicles, hyperthermia with kids left alone in vehicles, and the dangers of trunk entrapment.



Water Safety: Safe Kids North Shore was one of the primary partners involved in the creation of the **Northwest Michigan Water Safety Network:** a group of community partners that have begun efforts to collectively focus on water safety issues in the region. Some of the areas of focus include: water quality, navigating dangerous currents, beach signage to include

area dangers, water safety lessons for 3rd and 9th grade students of Traverse Area Public School system, community beach hazard awareness and more. The Network is chaired both by representatives from the Grand Traverse County Health Department and Safe Kids North Shore. Through the grant funds secured on behalf of the Network, water rescue stations equipped with a life ring, throw rope and instructional signage will appear at 39 locations along our local beaches in the spring of 2015. The Network's **Play It Safe in the Water** campaign has contributed safety signage, educational materials, social media communications, safety presentations and more.



Quizzing a child's water safety knowledge at a community event.

[Play it Safe in the Water Facebook Page](#)

Protecting People from Injuries, continued

Winter Safety: CHILL OUT for Winter Safety program was presented to approximately 1,600 kids at 7 schools and 3 community events. This safety program highlights winter dangers such as hypothermia, frostbite, ice navigation and head injuries. This year, new presenters – residents from the Munson Family Practice – joined in assisting with the delivery of the program. Students were very receptive to being able to interact with doctors outside of a medical setting. In addition, the CHILL OUT for Winter Safety program attended community events assisting in helmet fitting and distribution for winter sporting activities.

Driver Behavior: 1,558 high school students and 438 adults participated this year in the **Diminish Distracted Driving (3D)** program, a partnership with the Grand Traverse Sheriff's Office and the Michigan State Police. The 3D program heightens awareness regarding driver behaviors and the outcomes of those behaviors. Following an informative presentation, students experienced first-hand the dangers of distracted driving while using a driving simulator, the effects of driving while impaired by wearing "fatal-vision" goggles then engaging in mock field sobriety tests and finally participated in a segment of "Ask Law Enforcement" where they can have myths dispelled by law enforcement partners.



Our driving simulator is not so much about how a person drives it, as it is about the safety related conversations it segues us into having with the participant.



Helmet Use and Sports Injury Prevention was provided through the Kohl's 4 Season Safety program. The program partnered with local sports medicine physicians and orthopedic surgeons in delivering sport-specific injury information such as concussion prevention to local youth sports teams, coaches and parents.

A student athlete shows a news anchor how to put on a football helmet, following their segment about concussions and the importance of proper gear and being honest about symptoms if questioning a concussion.



Unfortunately, unintentional injuries continue to be the number one killer of children ages 1-14 and motor vehicle crashes the number one killer of persons ages 1-34. Through community partnerships, advocacy of best practices, public awareness, distribution of safety equipment and education, and training on the proper use of safety devices, we are making a difference in and around Grand Traverse County.

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