

Leelanau County

2012-2013 Annual Report

Message From the District Coordinator

MSU Extension (MSUE) in Leelanau County continues to provide local educational programming and impacts to meet Leelanau County and Michigan's needs. Extension staff members work diligently to maintain programming and reach as many residents as possible each year. Educators and all staff have worked hard to innovate creative and effective ways of providing programming at reduced costs.

This report provides highlights of MSU Extension's work in Leelanau County during 2012 within the structure of our four programmatic Institutes:

- Agriculture and Agribusiness Institute
- Children and Youth Institute
- Greening Michigan Institute
- Health and Nutrition Institute

MSU Extension has changed in many ways since our beginnings in the early 1900's. But we have not changed our focus of connecting education and research on campus to the people and businesses in the communities we serve. Thank you for your continued support of this critical partnership.

Sincerely,

Patrick I Cudney,

District 3 Coordinator

Mission

Michigan State University helps people improve their lives through an educational process that applies knowledge to critical issues, needs and opportunities.

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2012 Participation Numbers

Children & Youth	742
4-H Members (Traditional Club Enrollment)	470
Short Term/Special Interest Participants	165
4-H Adult Volunteers	80
4-H Youth Volunteers	27
4-H Clubs	34
Agriculture & Agribusiness	732
Greening Michigan	366
Health & Nutrition	875
Total	2,715

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4-H Children & Youth Educational Programs

Leelanau County 4-H participation helps children develop life skills, confidence and self-esteem. 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.



4-H Learn to Ski Program

This year 4-H clubs in Leelanau County participated in a variety of learning experiences. The winter 4-H Learn to Ski/Snowboard program had 124 youth swooshing down the fluffy white ski hills of The Homestead. In the spring and fall, over 24 youth learned golf basics and proper etiquette. Three active Robotics clubs and other clubs taught chess, sign language and beginning Spanish! A large number of youth worked with animal science education in horse, steer, llamas, sheep, pigs, chickens and rabbits. 165 youth participated in snowmobile and tractor safety. This summer three schools offered 4-H activities at Kids Club. It has been an educational and fun-filled year in Leelanau County 4-H!

» **4-H Participation with Local Organizations and Events** — This past year Leelanau County 4-H was actively involved in numerous expos and events to help local youth and adults learn more about 4-H. Volunteers and young people created crafts at Kids’ Day in the Grand Traverse Mall, walked in the Cherry Festival Parade, participated in Leelanau County’s Law Day, Cherry Connection, Senior Expo and the Grand Traverse Band of Ottawa and Chippewa Indian’s Expo. Presentations were given at all Leelanau County schools as well as Willow Hill Elementary. The 4-H tent was a big hit at Friday Night Live for two weeks in August as 4-H volunteers assisted the public with crafts and pond life investigation, and learned about chickens.



Leelanau County
4-H’ers visit Willow
Hill Elementary
School

» **4-H Exploration Days** is a VERY popular with Leelanau County teens! Seventy-eight delegates, including fourteen adults attended the 3-day event on MSU’s campus in June. Participants experienced dorm life and took 1-2 classes. To ensure 4-H is open to all, partial scholarships were secured from local donors for 29 limited-income youth to attend.

» **4-H Robotics** — This year was a year of growth for our 4-H Robotics Programs – it jumped from one club to three! One 4-H Robotics club participated in First Lego League Robotics competition in Traverse City. Youth in the club had to program a robot to do 10 different tasks for an elderly person. It was interesting to see students take risks in their learning and apply their mistakes and successes to achieve a goal in this competition. Although they didn’t win, they took away many good learning experiences and plan to compete again in December 2013.

- » **4-H State Award Representative from Leelanau County** — The 4-H State Awards recognizes members who have been very active in 4-H for more than three years. A senior 4-H member was nominated and completed a lengthy application process to be considered for a 2013 4-H State Award. After winning the county and regional award, she then moved on to the interview portion of the program and participated in the awards ceremony at MSU.
- » **4-H International Exchange in Leelanau County** — Leelanau County was the host to three foreign exchange students this past year from Japan. The 4-H International Exchange program works to foster relationships between the United States and other countries around the world. Youth who participate in these programs gain an understanding of American culture, diversity and respect for differing views and beliefs.
- » **2013 Leelanau County 4-H Youth Association Plat Book** — The 2013 plat book was locally produced and printed. This plat book is the major fund raising resource for the Leelanau County 4-H program. Thank you to all the local advertisers who helped to make this book possible!
- » **Leelanau 4-H'ers win MSU Scholarships** — Two Glen Lake sophomores were chosen to receive \$2000 scholarships to attend MSU after high school. They were selected based on their written responses to questions about their community involvement, academic ability and long-term goals. In the last six years, fourteen Leelanau teens have been selected to receive this award honor.
- » **4-H'ers Beautify their Community** — Members from Cedar Hills and Woolly Wonders 4-H Clubs planned, organized and helped to beautify their community. Club members cleared areas for flower beds, shoveled dirt and planted flowers and shrubs in the village of Cedar – using their “hands for larger service,” which is part of the 4-H pledge.
- » **4-H Members Learn to Create a Budget** — Deciding to raise a 4-H animal is exciting! It can also be bewildering as families try to calculate ahead of time what they are likely to spend. In a hands-on simulation, 4-H members had to make decisions how they wanted to allocate their limited finances in 20+ expense categories. In the process, participants learned about opportunity costs and each experienced a slice of reality through “action cards.” Participants also discussed specific actions they could take to improve the profit margin of their 4-H animal projects.
- » **Life Skill\$ through 4-H** — Prior to heading off to college, high school seniors at Leland School participated in a four-week course on money management. Topics included budgeting, debit and credit cards, scholarships and investing. Third through sixth graders at Summer Kids Club in Suttons Bay learned about coins and saving using the “Reading Makes Cents” 4-H curriculum.



Glen Lake Electronics
4-H club members
competing at First
Lego League Robotics
Competition

“Thank you for helping me go to 4-H Exploration Days! While I was there, I got to dissect a sheep’s heart and a cow’s eye. I hope to go again next year!”

“Thank you for your help! I took climbing and rappelling and loved it! I can’t wait for next year!”

~ 4-H Exploration
Days youth attendee



4-H'ers work on a
garden in Cedar

- » **Northwest Michigan Orchard & Vineyard Show** — Over 290 people attended the educational sessions at the 2013 NW Michigan Orchard & Vineyard Show held in Acme, Grand Traverse County. Sessions covered a broad range of production, pest management and marketing issues. Forty-seven of the attendees listed grapes as their primary fruit crop, 115 declared tree fruits as their primary crop.
- » **Wine Grape IPM Kick-Off** — This spring program was attended by grape growers from throughout the Grand Traverse Bay region. The main topic of this year's program was soil biology and soil health, with speakers from a private agricultural consulting firm and a commercial composting company.
- » **Northwest Michigan Horticultural Research Station Annual Open House** — Dr. Paolo Sabbatini from the MSU Department of Horticulture joined local MSUE staff to present information on over a dozen new grape varieties being tested at the station in Leelanau County. Grape growers and winemakers from across northwest Michigan were on hand to see and taste the new varieties.
- » **Great Lakes Fruit & Vegetable Expo Grape Sessions** — 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.
- » **Vineyard Sprayer Workshop** — A dozen participants were informed about techniques and equipment useful for the calibration and adjustment of vineyard airblast sprayers. A device called a "patternator" was used to visualize sprayer output patterns. Local MSUE staff were assisted in this program by a state-wide pesticide application/safety educator and a representative from a private spray application technology firm.
- » **American Society for Enology and Viticulture, Eastern Branch Annual Meeting** — This was the first time this meeting had been hosted by Michigan for several decades. It was a fantastic showcase for the Grand Traverse region and all Michigan wineries. MSUE staff assisted with local arrangements and regional tours for participants.
- » **Grape Research & Demonstration Projects** — Grape variety trials and growing practices research continued in 2012. Due to changes in emphasis and funding at the MSU department of Horticulture, fewer of the grape varieties being tested at the Northwest Michigan Horticultural Research Center were processed into wine on campus. Cooperative arrangements were made with several NW Michigan commercial winemakers to produce test wines from the 2012 grape research plots. Four students in the Viticulture and Enology Science & Teaching Alliance (VESTA) received many hours of hands-on experience in the experimental vineyard.



- » **Saskatoon Grower Support** — During 2012 MSUE educators assisted in the development of the Saskatoon Berry Institute of North America, a new organization started by growers and marketers of saskatoons from northern Michigan. Pesticide recommendations for Michigan production of this crop were prepared and provided to growers for the first time in early 2013.
- » **Climate Variability Meetings** — Increasing world population is placing more pressure on farmers to increase food production locally as well as around the globe. However, recent research has shown localized changes in climatic conditions over the last three decades is making food production less reliable than in the past. Notable changes in the climate include warmer temperatures, more frequent severe weather events, more precipitation, and an earlier onset of spring. These changes in climate have resulted in over winter pest survival and also have the potential to increase pest generations per season. Also due to climate change is increased erosion due to extreme precipitation events, longer and more variable growing seasons, and periods of excessive wetness and drought. All of these changes pose a threat to producing a crop year-in and year-out. Michigan farmers are faced with the challenge of meeting the needs of our growing population while maintaining the sustainability of livestock and cropping systems.



Cutting cherry buds to assess damage

To address some of these important issues, a Michigan State University Extension (MSUE) team hosted four meetings around the state targeting four unique segments of Michigan's agriculture: fruit, crops and livestock, state and federal governmental agency staff, and the agri-business community. Each of the meetings were a full day event that included a brief morning overview of the most current research about climate variability and production practices that promote sustainable production of food and fuel around the United States. During the afternoon, a listening session was hosted where participants openly discussed climate-related issues, impacts on Michigan agriculture as a whole, and recent weather events on local farms. Questions were designed to establish what the needs of each of these segments are so that we can prioritize how MSUE can assist growers and producers. The MSUE team consisted of both field staff and campus specialists that work in disciplines associated with the four above named groups.

Research from communication experts highlights the importance of dialogue with stakeholder groups when addressing complex topics like sustainability and climate variability. Our interdisciplinary team decided that the optimal strategy for discussing these difficult issues and their impacts on Michigan agriculture is to ask farmers about their current and future challenges in producing sustainable and economical food and fuel. Once the team gains a better understanding of the key challenges impacting Michigan producers, we can tailor Extension programs, research, and outreach programs to meet the immediate and future demands of the agricultural community.

These four sessions will begin an open and honest discussion on how to meet production objectives in Michigan with variability in climatic conditions. By determining needs and establishing research and outreach programming priorities, MSUE can assist agricultural producers in adapting production operations and minimize on-farm risk as weather-related challenges continue.

Following a difficult 2012 year for most of Michigan agriculture, we hope that this season will bring a bountiful crop for all of the state's growers. However, if model predictions are correct and we continue to see variability in our climate and weather patterns, we hope these meetings will help the Michigan industry and MSU work together to keep farming alive and well in Michigan.

- » **Good Food - Safe Food: Reducing the Potential for Antibiotic Residues in Milk or Meat** — From December 2012 through February 2013, the MSU Dairy Team conducted 13 half-day meetings on reducing antibiotic residues in milk and meat. This topic was suggested by the Extension Dairy Advisory Team and supported by them as timely and important. Each Dairy Educator played important roles in promotion, organization, finances and instruction. The meetings were intended to correspond with the planned January 2013 release of an FDA report on a study of residues in milk. The agenda explored the issues of residues in both milk and meat and practical preventative aspects including valid veterinary client patient relationship (VCPR), development of protocols and communication on farm with all involved. The agenda was planned to involve a local veterinarian on the program at each site. A bound conference proceedings was produced and provided to each participant. Meetings were supported by industry. One veterinary health company had a representative at eight meetings. MSU Extension took a leadership role in putting on these meetings that would not directly impact producer profitability nor production and are not new regulations. Yet they are important to the industry because of the need for consumer confidence in the safety of food.

The total attendance at these meetings was 187. These meetings were particularly well supported by the Michigan Department of Agriculture & Rural Development (MDARD) Animal Industry Division which sent their field and administrative staff to these meetings. Michigan Milk Producers Association (MMPA) likewise sent their field staff, laboratory and key staff, and two board members to the meetings. An estimated 90 producers attended.

The Good Food - Safe Food program was offered as a pre-conference session at the Great Lakes Regional Dairy Conference. This is the first time that a pre-conference session has been offered at GLRDC. The session was included in the GLRDC flier at no charge and admission was free. The program was well attended by a total of 62 out of 400 GLRDC attendees.



The meetings spurred discourse on the topic by professionals working with a number of dairy producers. Ten private practice veterinarians served as speakers on the program. Four additional private practice veterinarians attended. It is estimated that these veterinarians work with approximately 250 dairy farms with more than 80,000 cows. As a result, MDARD planned and hosted a one-day conference for food animal practice veterinarians entitled “When is Drug Use Appropriate?” That meeting will be followed up with additional workshops for veterinarians with the purpose of encouraging greater adherence to VCPR intent and greater use of drug protocols for farms. MMPA has told us that their field representatives will talk with members on-farm about the issues and avoidance of potential residues. A 6-month follow-up survey will be conducted to determine actual impacts of the program.

Articles have been written by Durst and Schwehofer and published on the MSU Extension News website:

- “Antibiotic residue testing in meat results in few positive samples”
Jeannine Schwehofer
- “Do you have a valid Veterinary Client Patient Relationship?” Phil Durst
- “Work with your veterinarian on drug protocols” Phil Durst

» **Agriculture Labor Programs** were offered in five locations within Michigan in 2013. Three of the locations included Traverse City, Shepherd and Sandusky.

MSU Extension Educators work to tailor the program to the specific needs in the various areas of the state and the various commodity groups. The TC location program was significantly different from the Shepherd and Sandusky location as it focused mostly on a fruit grower audience and their unique needs with a shrinking migrant labor force. This variance was directed by grower input, and the program was planned around an overall effort to assist producers in the NW Lower Peninsula that have experienced great hardship because of last year’s fruit freeze. The TC location also had several grower speakers focusing on how they manage diverse labor pools and also sharing technology that they use to make labor management more efficient. The final difference in the TC location is that the Ag Labor Management portion of the program covered the entire programming time, whereas in the Shepherd and Sandusky location this was limited to the morning with an Ag Labor Safety program being conducted in the afternoon. The Ag Labor Safety program is a partnership between MSU and Michigan Farm Bureau.

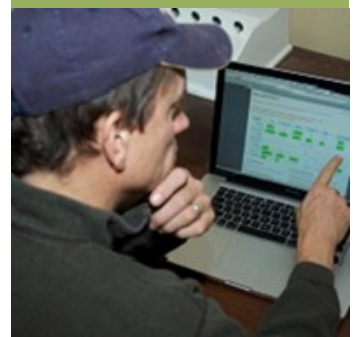
The Shepherd and Sandusky locations were specifically marketed toward dairy producers in these heavy dairy areas, although all producers were welcome to attend. Attendance at these two locations was less than expected (13 & 11 respectively), but we see this as a first effort to reach the dairy audience with this very important program.



All three locations utilized speakers from the MI Workforce Development Agency, ICE, and MSU Extension (Stan Moore common speaker). This allowed us to summarize the evaluation questions that were repeated over the three programs and perform statistical analysis on the combined responses. The common denominator of the three programs revolved around “Understanding Ag Labor issues and complying with Farm Labor Laws.”

The survey results represent 26,060 acres of agricultural production in Michigan. Results showed a statistically significant change in participants knowledge of agricultural labor law regulations, preparedness for a labor inspection, skills necessary to work with multiple sources of labor (TC location only), understanding of what skills and tools they need to manage labor more effectively, belief that employee retention on their farm would increase in the future (TC only), and willingness to explore hiring from a different source of labor than they had in the past. On a scale of 1 – 5, with 1 being strongly disagree and 5 being strongly agree, respondents indicated that they would implement some of the concepts learned at the program with a rating of 4.42. Respondents also indicated that their knowledge of agriculture labor state resources improved (3.71 with 1 being no change and 5 being greatly improved), as well as their knowledge of agriculture labor regulations (3.69). Finally, at the TC location, respondents indicated that their skills in agriculture labor management increased (3.72).

- » **Farm Information Resource Management (FIRM)** assists farmers, agriculturally-related businesses, industries, families, and individuals improve their lives and achieve their goals through an educational process that applies management, production and economic knowledge to critical issues, needs, and opportunities. The FIRM team was involved in the following in the Northwest Michigan region in 2012:
 - **Oil and gas leasing information and individual consulting** — Landowners received detailed information about oil and gas leasing and development. Care was given to enable participants to more deeply understand some of the critical points in the lease that may impact them when they are participants in an oil and gas well that is placed on their farmland.
 - **2012 Fruit Freeze** — The FIRM team created the 24 month Fruit Cash Flow Budget Planner, an Excel program that allows a fruit producer to project income, expense and cash flows for business and succession planning. This is also required by lenders as part of qualifying for the 2012 MI Emergency Loan program.
 - **Cropland leasing consultation** — For the district as a whole, approximately 16 producers were counseled and given printed information about cropland leasing and lease rates. One landowner in Benzie County was counseled on steps to take to begin farming land again that had not been farmed for many years.



Analyzing farm management plan

Greening Michigan Educational Programs



- » **Hops Research, Education, and Outreach** — In 2012 Michigan State University Extension in Leelanau County continued to provide statewide leadership for hops research, education, and outreach. MSUE secured Project GREEN funding to further its Hops Variety Trial at the Northwest Michigan Horticulture Research Station in Leelanau County. MSUE also hosted its 4th annual Northwest Michigan Hops tour that was attended by over 80 participants from the Midwest, Colorado, and Canada. Additionally, we were able to bring Jason Perrault, a 4th generation hops grower and one of the best hops breeders in North America to the Great Lakes Expo, held in December in Grand Rapids, MI. Finally, MSUE hosted Integrated Pest Management Academy at MSU in February, with a specific focus on pest and disease management in hops production. As a result of MSUE efforts in this arena since 2007, Leelanau County has more acreage in hops acreage in production than any other county in Michigan.

- » **Food Hub** — In collaboration with NWMCOG, we secured a \$200,000 MDARD food hub grant to develop a regional food hub in the Grand Traverse Region. A portion of the funding was used to purchase vegetable washing and processing equipment that is being used to process vegetables for school lunch programs throughout Leelanau County and beyond. The remainder of the funds will be used for infrastructure development for a regional food hub in Traverse City that will house regional agricultural related businesses (the first three tenants are Leelanau County-based businesses).



Dr. Serrine continues to serve as the chair of the Northwest Michigan Food and Farming Network whose overarching organizational goal is to increase local production and consumption of food so that by 2020, 20% of the food consumed in the region will be grown in the region.

Dr. Serrine and local project partners were also instrumental in helping develop a new northwest Michigan based non-profit entity that will manage the regional food hub: "The Grand Traverse Foodshed Alliance".

- » **Increasing Food Access for Underserved Residents** — MSUE continued to promote the Double Up Food Bucks Program through its role on the Leelanau Farmers Market Association Board of Directors. The Double Up Food Bucks Program allows residents with Bridge Cards who received SNAP benefits to swipe their cards at participating farmers markets and receive tokens that "double" their purchasing power for fresh fruits and vegetables. In 2012, at Lake Leelanau and Suttons Bay Farmers Markets, \$2721 was spent, which concomitantly served to increase food access and improve farmers' bottom line.

- » **Financial Literacy Programs** — MSU Extension addresses financial health of individuals and families through community-based educational programs. The overarching goal of these efforts is for Michigan consumers to become aware of their personal financial profile, to adopt sound financial practices – and identify goals and the steps necessary to reach self-sufficiency.

Evaluation results reveal that the financial education program was effective in reaching the goals of positively changing financial practices among Michigan residents. Participants show significant changes in the frequency of writing spending plans, keeping track of spending and income, saving money regularly, reviewing credit card bills for accuracy, and paying off new credit card charges monthly. Other outcomes include participants reporting the ability to pay down their debt, obtain a housing payment that fits within their budget, and making choices today that will make retirement a reality.

- » **Housing Education Programs** train Michigan residents to be better consumers and help to secure and retain home ownership. Homeownership education and counseling gets buyers into lower-cost mortgages, increases credit scores, reduces defaults, improves borrowers' financial standing, and increases the likelihood of troubled borrowers seeking foreclosure prevention assistance.

Based on evaluation results, housing education was effective in reaching the goal of helping Michigan residents secure and retain homeownership as well as avoid foreclosure or to proceed with foreclosure as informed consumers. Michigan residents that completed MSUE housing education programs reported saving money to prepare for homeownership, an improved credit score, setting aside funds for home maintenance, and shopping around periodically for the best home insurance coverage. Other program outcomes show residents were able to identify the best mortgage type for their situation and gained new skills to calculate reasonable monthly housing costs based on household budgets. Housing education participants also reported greater confidence to review fees and rights related to homeownership and foreclosure processes. During 2012, MSU Extension served 4,212 people in Michigan through 416 financial literacy and housing education series and workshops.

- » **Master Gardener Program** In 2012, a twelve-week long, forty hour Master Gardener Volunteer Training program was offered. Once those attendees were trained, they actively volunteered in their communities. Volunteers assisted and provided leadership to a variety of not-for-profit projects related to the following five focus areas: environmental stewardship; food security and hunger; social (improving community); youth gardening; and supporting MSU Extension county offices. A number of volunteers also provided mentoring to adults and youth at school garden projects at a number of area schools, including the Leelanau Children's Center, Grand Traverse Band Benodjenh government services. Monthly meetings also include a legislative update from the MI Association of Counties.Center, Suttons Bay School, and Northport School. The class is again being offered in the Fall of 2013.



Placemaking & the New Economy — In the new or global economy, the rules and strategies for economic development have changed. Communities that will be successful and have prosperity are those that understand and adapt to those changes. Because Michigan has historically done well with the automobile economy and associated manufacturing, the incentive to make this shift has not existed. As a result, Michigan is behind the curve in adjusting to the new global economy.



In the global economy, attracting talented workers is an important economic development strategy. Research on housing markets and demographics has demonstrated the demand for quality of life and places is what attracts talented workers. Talented workers are what bring employers to a community, or those talented individuals become employers. Those talented individuals are very mobile, and can choose to live anywhere, and they do. Only those communities that measure up to what they want will be successful in the new economy. Placemaking is a series of action steps and strategies to help make a region and its communities places where talented individuals wish to locate, which in turn brings prosperity to a region and community.

The process of Placemaking involves many organizations (public, private, and not-for-profit) in a community and region. But the two main actors are the economic development office and the planning commission/department. The Placemaking

signature program is targeting training to help local officials understand this dynamic and to put into place actions (master plan, zoning, economic strategies) to start this process in regions and communities. This Placemaking signature program is still being rolled out. A number of pilot sessions were done in 2012. A large multi-organization effort on Placemaking will take place later in 2013-15.

Components and measures of a strong successful "Place."

- » **Michigan Northern Counties Association** — Bringing county commissioners together from 33 counties in northern lower Michigan to learn about issues important to county government, and to share information and learn from the experiences of others has long been the goal of the Michigan Northern Counties Association (MNCA). Recent topics include: the Affordable Care Act, Building Trust, Vanishing Great Lakes Water Levels, DNR Public Land Management Strategy, Recycling and the impacts of these issues on county government services. Monthly meetings also include a legislative update from the MI 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. Commissioners and others from Leelanau County participated in the program in 2012.
- » **Product Center Food-Ag-Bio** is a unit of the Department of Agricultural, Food, and Resource Economics. With the goal of accelerating innovation and growth for Michigan business, industry and entrepreneurs in food, agriculture and bio-manufacturing, the Product Center stimulates and develops business innovation and economic growth through business counseling, in-depth market analysis and technical assistance for new entrepreneurs and existing businesses. The use of best practices, knowledge and experience along with collaboration from internal MSU and external partners supports clients in the creation of successful ventures.

In 2012, the Product Center provided 23 one-on-one counseling sessions to local businesses in Leelanau County.

- » **Coastal Aquatic Habitat / Healthy Coastal Ecosystems** — Sea Grant Educator Mark Breederland continued to educate, coordinate and respond where appropriate to waterfowl botulism kills in Northwest Lower Michigan. Based on a relative scale of high-medium-low, avian botulism kills in Fall 2012 were in the medium category with some localized areas of medium-high incidences. Michigan Sea Grant released a call for research proposals for an integrated assessment on avian botulism in April 2013 and will consider future research funding in this topic.

Mark Breederland also worked with Leelanau Township officials and Sleeping Bear Dunes National Lakeshore personnel on dangerous currents issues in Leelanau County due to tragedies in 2012. Leelanau Township installed signs and a rescue station in July, 2013 at Vans Beach based on information from the Michigan Sea Grant program. Signage was installed at various beaches in the Sleeping Bear Dunes and additional rescue stations are expected in Leelanau Township. Additionally, a presentation was made at Leland Public Schools on water safety in Lake Michigan.

Rescue station with life saving equipment installed at Van's Beach in Leland.



The Health and Nutrition Institute provides education for families around several areas: Disease Prevention & Management, Social Emotional Health & Well Being, Improving Nutrition & Physical Activity, and Food Safety.



“This program gives people a choice; do they want to continue to be angry and carry that anger around for the rest of their lives or do they want to be free of situations that occurred in the past and move forward. By actively participating in the RELAX program you can learn new ways to think about yourself, your anger and those around you and begin to live an anger-free life style.”

~ Jean Lakin,
MSUE Educator and
Co-Author of RELAX

- » **Chronic Disease Self-Management (PATH)** — Participants of PATH (Personal Action Toward Health) programs report improved symptom management including decreased worry, decreased fearfulness about future health, and fewer frustrations about health problems. At the end of the series, PATH participants show decreased symptoms of fatigue, decreased shortness of breath, and decreased self-reported pain. Other program benefits show increased physical activity and improved communication with physicians including preparing a list of questions to ask during a healthcare visit. Participants report higher self-efficacy after attending the program and show improved self-rated health scores. During 2012, there were 27 PATH series held statewide reaching 305 people in 27 counties.
- » **RELAX: Alternatives to Anger** is designed to actively engage adult learners in a group setting to increase knowledge and skills around anger management and give them constructive ways to deal with anger. Aspects of promoting social emotional health are woven throughout the training and include expressing emotions, navigating stress, resolving interpersonal conflict, taking another’s perspective, feeling capable and whole, and building skills for forming and maintaining satisfying, healthy and supportive relationships. In 2012, MSU Extension offered RELAX as a series of sessions for participants (face-to-face and online), as well as a RELAX Train-the-Trainer for professional audiences.

During 2012, fifty-five RELAX series took place statewide reaching 695 participants. A total of 486 program evaluations were returned at the end of RELAX workshop series with program participants’ pre- and post-test rankings of knowledge and behavior changes. Consistently, more than half of program participants leave with improved knowledge or new skills designed to promote social and emotional well-being with others in their lives and immediate social environments.
- » **The Supplemental Nutrition Assistance Program - Education (SNAP-Ed)** provides nutrition education to Bridge card eligible adults and children. This program focuses on improving dietary quality, 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 Leelanau County, 56 adults and 132 youth were reached through nutrition education classes at various venues in the county. There were a total of 524 contacts with these groups in total.

An expanded partnership over the past year with Share our Strength's Cooking Matters™ has allowed nutrition education staff to teach healthy eating during a cooking class. Leelanau County MSU Extension nutrition staff partner with a volunteer culinary chef to teach adults and teens how to select nutritious and low-cost ingredients and prepare them healthily. Cooking Matters specialized curricula covers practical nutrition information, hands-on food preparation, and food budgeting and shopping. The adult participants receive recipes and other educational materials from the lessons and also receive a take home bag of groceries each week funded by Wal-Mart to practice what they've learned in class. Cooking Matters courses are designed as six weekly, two-hour lessons with curriculum target audiences of adults, teens, and childcare professionals. This program continues to be popular in Leelanau County reaching new adults and youth.

MSUE also provided nutrition education to eligible seniors and WIC families on the benefits of including fruits and vegetables in their diet. Participants increased the quality of their diet by purchasing locally grown fresh fruit and vegetables from Leelanau County farmer's markets through Project FRESH and Market FRESH. These coupons are redeemed at the farm market for over \$2,100 in funds for produce grown by local farmers.

As with all Health and Nutrition Institute education programs, success is determined not only by the number of individuals staff worked with but more importantly, how their knowledge or behavior was changed as a result of attending the classes.

Adult Program Impacts:

- 94% of the participants completing the series had a positive change in any food group at exit (Grains – Fruits – Vegetables – Milk – Meat & Beans).
- 82% of participants showed improvement in one or more nutrition practices: planning meals, makes healthy food choices, preparing foods without adding salt, reading nutrition labels or has children eat breakfast.
- 72% of participants demonstrated acceptable food safety practices at the end of the program.
- 75% of participants showed improvement in one or more food resource management practices: planning meals, comparing prices, does not run out of food or uses grocery lists.

Youth Program Impacts:

- 71% of the children from kindergarten to second grade reported a





significant increase in their knowledge about food groups

- 88% of school teachers reported children being more aware of the importance of healthy nutrition.
- 93% of school teachers reported that children are more willing to try new foods.
- 86% of school teachers reported that children improved hand washing.

This past year, a Cooking Matters with Teens class was conducted with a Suttons Bay High School class. The teens who participated were highly skeptical on how to prepare healthier foods as well as reticent on tasting the different recipes we tasted like whole grain macaroni and cheese as well as breakfast burritos. The final activity of the class was to do an extreme food makeover and their creations were judged by the teachers and the principal. Their makeovers were amazing and received rave reviews from the judges. At the end of the class, one of the teens reported that the class changed how he thought about eating and he was planning to make better food choices.

- » **Food Preservation** — Michigan State University Extension educates community food handlers on skills and techniques for proper food preservation in an effort to decrease foodborne illnesses. Food-borne illness outbreaks occur on an ongoing basis crossing all lines – from production, consumption and preservation of foods. Residents in Michigan communities have the opportunity to receive high quality education on safe temperatures for storing food, cooling hot foods, storing temperatures, freezing and dehydrating food, as well as canning using the United State Department of Agriculture guidelines for safe food preservation. Food Preservation Education offered by MSU Extension is a workshop intended to teach safe food processing and canning techniques to homeowners.



Food preservation education contributes to safer food sources, especially those produced locally by Michigan residents. As a result of food preservation workshops, 89% increased knowledge of how to use proper processing techniques to safely can low- and high-acid foods, 87% learned the correct processing times to can foods safely, and 76% gained knowledge of how to use proper techniques for freezing foods. Participants also reported learning where to locate research based/tested recipes for home food preservation, how to follow research based/tested recipes when canning food at home, and how to select high quality foods for preservation.

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