Charlevoix County

2012-2013 Annual Report

Message From the District Coordinator

MSU Extension (MSUE) in Charlevoix County continues to provide local educational programming and impacts to meet Charlevoix 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 Charlevoix County during 2012 and 2013 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

2012-2013 Participation Numbers

- 4-H Children & Youth programs .................................................. 1,648
- 4-H Members (Traditional Club Enrollment) .................................. 1,179
- 4-H Adult & Youth Volunteers ...................................................... 240
- Short Term/Special Interest Participants ...................................... 229
- 4-H Clubs .................................................................................. 21
- Agriculture & Agribusiness ......................................................... 212
- Greening Michigan programs ...................................................... 222
- Health & Nutrition programs ...................................................... 2,192
- Total ....................................................................................... 4,274

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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The Charlevoix County 4-H Program currently has an enrollment of 1179 youth in 21 4-H clubs and 8 county committees. These clubs and committees are supported by 175 adult and 65 youth volunteers. Health, food & nutrition, physical fitness, community service, communications, leadership, plant science, earth science, crafts, market livestock, animals, and citizenship are some of the project areas that the clubs offer.

» **4-H Exploration Days** at MSU provides youth ages 11-19 with the opportunity to experience life on a college campus. The 4-day event held in June each year gives over 2,500 4-H members a chance to live in the dorms, experience a college setting, and be self-directing and responsible for getting themselves where they need to be. This year, 21 youth and 3 adult attended from Charlevoix County, as part of a 56 member delegation from Charlevoix, Emmet and Otsego counties. Participants traveled by charter bus, stayed on campus and experienced dorm life, and also attended a variety of classes and other enrichment events. Some of the classes that Charlevoix County youth took part in included: livestock judging 101, Irish road bowling, rocketry, hunting Michigan’s big 5, scrapbooking, veterinary school 101, teen court & juvenile justice, yoga, volleyball, basketball, from the lake to the pan, and hoof care for your horse.

» **Emmet-Charlevoix County Fair** — This year-end event is held in mid-August and is an opportunity for 4-H youth to showcase their projects. The 4-H projects are exhibited in the Community Center where clubs set up their booths to display the member’s projects as well as their club’s community service activities. Over 1,800 exhibits are on display in that building and over 500 animal projects can be found in the many livestock barns. Members involved in animal projects are kept busy participating in the 10 horse shows, 15 livestock shows, 5 small animal shows, 2 dog agility classes. 2 exotic animal shows and the livestock auction. Non-competitive events are offered for the Cloverbud members (age 5-8) and free-time events include scavenger hunts, a 4-H dance sponsored by the fairboard, and an “Ask Me” pen where youth volunteer their time to meet the public and answer questions about their 4-H projects. Over 30 teen leaders serve as mentors for the younger members as they serve on barn duty and offer showmanship clinics; adult volunteers provide leadership as barn superintendents, show day’s clerks, announcers, award presenters, and overnight barn duty workers. Adults and teens are also instrumental in setting up the Community Center the week before the fair and the tear-down of the exhibits at the end of the week. The fair is a wonderful opportunity for the 4-H members who exhibit and participate in the many fair events. It is also a great opportunity to promote the 4-H program, volunteer opportunities, and youth development opportunities available to the youth in our county.

4-H members with their horses at the 2013 Emmet-Charlevoix County Fair.
Vet-A-Visit is the annual open house at the MSU College of Veterinary Medicine. On April 6th, a group of 56 Charlevoix, Emmet and Cheboygan Counties 4-H members and parents attended the day-long event on the MSU Campus. They participated in hands-on workshops, tours and lectures. Topics included: Stuffed Animal Surgery, Canine Agility, Zeke the Wonder Dog, Vet School Confidential, Equine Treadmill and Dressage Demonstrations, a Painted horse, petting zoo, How to Milk a Cow, small animal exhibits, So you Want to be a Vet, as well as kid's crafts.

Take A Day On — Charlevoix County 4-H youth participated in the 13th Annual community service learning project called TAKE A DAY ON! This is an event where youth get to take a day off of school and take a day on for an organization in their local community. The event this year was on Tuesday, May 7th at Second Chance Ranch and Rescue in Boyne City. We had 16 youth and 7 adults in attendance. Second Chance Ranch is a non-profit organization dedicated to the rescue and rehabilitation of large animals in Northern Michigan that have been taken in due to neglect or abandonment. Students learned about the signs and symptoms of neglect and road to recovery of animals that come to the Ranch. The day was spent cleaning the chicken coop, taking down and putting up fencing as well as cleaning up the pasture and grounds. That evening the ranch received a call of a seizure of 12 horses from Antrim County. Youth also collected many donations of hay, horse halters/leads, blankets and treats to give to the Ranch.

China Art Exchange — Thousands of Michigan 4-H youth, kindergarten through sixth grade participated in the 2013 4-H Art Exchange with China. St. Mary’s School in Charlevoix had 66 youth take part in this wonderful exchange. As part of the art exchange, children were asked to paint or draw “visual letters” for Chinese children their own ages. A visual letter is like a written letter in that they both tell a story, share important ideas and feelings and connect children regardless of where they live. Four youth’s artwork from Charlevoix County was selected to be sent and exhibited in schools in Shandong Province, China.

“What was really exciting about vet-a-visit was seeing the animals. One day I want to be a veterinarian, so it was like going to a mini vet school.”

~ Josie Bollmann, 4-H Member

“Take A Day On was a great experience for 4-H youth. It helped my children who also participated become aware of how important it is to volunteer and give back to our community. It gave true meaning to the words of the 4-H pledge.”

~ Carrie Bollmann, 4-H Leader

(Left) 4-H Youth, Leaders, and Volunteers who participated in Take A Day On at Second Chance Ranch, Boyne City.

(Left to Right) From Shandong Province, China to Charlevoix County, Michigan.
The Boyne Area 4-H Soccer Program offers an athletic way for youth to be involved in 4-H programs. 347 youth in grades kindergarten through 8th grade are involved in the Boyne Area 4-H soccer program that is supported by 65 volunteer coaches for both fall and spring seasons. Participation in sports, including soccer, offers benefits that are consistent with elements of positive youth development. Studies have shown that the soccer experience supports the need for youth exercise and fitness. Further, it helps youth develop physical competence, a positive self-image, social skills, cooperation and teamwork skills, and the ability to handle the highs and lows associated with winning and losing.

Sports and Fitness Clubs — Using Jump Into Food & Fitness (JIFF) curriculum, Charlevoix County 4-H offers a wide range of sports education to its local youth such as: spring soccer, summer soccer camps, fall soccer, travel soccer, sailing, sailing races, swimming, golf, tennis, and wrestling. Adult and teen leaders have fun teaching the sport while tackling the serious business of teaching kids about healthy food choices and the importance of being physically active and how it pertains to the sport they are learning. The JIFF, research-based curriculum is designed for adults and older teens to use with kids aged 8 to 11 (grades 3 to 5). ‘Jiff the Joey’ sets the stage for each of the eight ‘Kangaroo Jumps’ or sessions in JIFF. Fun nutrition, physical fitness and food safety learning activities are integrated into the program, which uses the MyActivity Pyramid and the MyPyramid for Kids.
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.
Agriculture & Agribusiness Educational Programs

» 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.

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 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 Schweihofer and published on the MSU Extension News website:

- “Antibiotic residue testing in meat results in few positive samples” Jeannine Schweihofer
- “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.
Agriculture & Agribusiness Educational Programs

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.
Understanding and Investigating Horse Cruelty — Michigan State University Extension collaborated with the Michigan Humane Society, Director of Statewide Initiatives, Linda Reider to deliver a Michigan Partnership for Animal Welfare - Understanding and Investigating Horse Cruelty Workshop held at Cherryland Humane Society in Traverse City on February 27, 2013.

Due to drought conditions in some regions of Michigan in 2012, hay availability for horse owners became limited. Limited hay availability caused hay prices to rise dramatically. Therefore, in the fall of 2012, the Status of Michigan Horses Interagency Working Group was formed. Agencies represented in the Interagency Working Group include Michigan State University Extension, Michigan Department of Agriculture and Rural Development, Michigan Farm Bureau, Michigan Horse Council, Farm Service Agency and the Michigan Humane Society. The goal of the Interagency Working Group was to evaluate what potential issues were occurring within the Michigan Equine Industry. Based on the consensus of the working group, contacts with horse owners searching for feed resources, reports of thin horses and horse owners searching for alternatives for horses they no longer preferred or could afford to take care of were identified as issues. In turn, realizing that law enforcement agencies would be on the front lines when potentially dealing with some of these issues, a workshop entitled Understanding and Investigating Horse Cruelty was developed. Educational topics of the workshop included: 1) Best Practices for Evaluating Basic Equine Health and Body Condition presented by Karen Waite, MSU Equine Extension Specialist, 2) Handling – Making it Safe for You and the Horse presented Tom Guthrie, Statewide MSU Extension Educator, Equine 3) Working with Your Local Prosecutor; Horses as Evidence and Handling the Media presented by Debby MacDonald, Chief Investigator and Detroit Shelter Director for Michigan Humane Society and Terry MacKillop, current and past president and legislative liaison for the Michigan Association of Animal Control Officers (MAACO), director of Roscommon County Animal Control and Shelter. Educational presentations were followed by a roundtable discussion with participants entitled: Putting it all together for best outcomes for horses and cases to wrap up the workshop.

A total of 33 participants consisting of animal control officers, sheriff deputies, prosecuting attorney and Humane Society employees representing 20 Michigan counties attended the workshop. Horse experience level of participants ranged from experienced and owning horses of their own to no experience.
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 — including managing a spending and savings plan and utilizing financial products and services in a beneficial manner 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 of the MSU Extension financial education programs 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 shown in the evaluation results 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 in the state. Sustainable housing is important to individuals and families. Homeownership education and counseling gets buyers into lower-cost mortgages, increase credit scores, reduce defaults, improve borrowers' financial standing, and increase 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, as a result of the program, 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 make informed decisions including reviewing 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.
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.

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.
Greening Michigan Educational Programs

» **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, department heads and others from Charlevoix 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 20 one-on-one counseling sessions to local businesses in Charlevoix 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 spoke at the 2012 Lake Charlevoix Association annual meeting on lake levels. Later in Fall, 2012, the levels dropped significantly and citizens in Charlevoix County took actions to manage the record low lake levels which occurred in January 2013. The Lake Charlevoix Association also gave a lake levels program in May 2013 based on information from a prior Michigan Sea Grant program.

![Low water levels on Lake Charlevoix, Round Lake and Lake Michigan](greatlakes.usace.army.mil)
Community Engagement and Leadership Development — Professional development sessions were attended by Banks Township and Village of Ellsworth elected and appointed officials and others, covering issues of local public leaders’ responsibilities, making effective community decisions, public participation planning timelines, successful use of parliamentary procedures, general discussion of placemaking and local implications for future sustainable economic development. 100% of attendees reported an increase in their knowledge, skills and confidence in using good meeting process, conflict management skills, and effectively involving the public when making community decisions. 73% of attendees indicated that they are now better prepared to make a change in their community as a result of the sessions provided by MSUE.

The Water and Air Team Charlevoix (WATCH) Board of Directors also attended a professional development session, covering fundamentals of effective board leadership and interaction skills, analyzing aspects of effective meetings, the role of board leadership vs. the executive director, public involvement and aspects of public input, basics and proper use of Robert’s Rules of Order. Short term issues and long term goals were prioritized and there was general discussion of a Vision Statement draft to be finalized at a later board meeting. Additional programming opportunities were brainstormed as part of both short and long-term goals.

A meeting was requested by the Charlevoix County Community Foundation to discuss facilitation of development of a good working model for currently partnered East Jordan community service agencies. There are numerous possibilities for providing services more effectively to local citizens by these agencies, yet it is difficult to reach a collaborative atmosphere. MSU Extension has been asked to design, deliver and facilitate a (series of) educational / planning sessions with staff from the East Jordan Ecumenical Ministerial Association, the East Jordan Care & Share Food Pantry, and the East Jordan Crossroads Resale Shop, and other organizations as identified. The Foundation will schedule an initial meeting with the three organizations and their Board Presidents. The goal is to reach consensus on working together for positive change for servicing disadvantaged individuals in the East Jordan area.

Inter-governmental efforts to protect water quality — Representatives from four townships and two cities met on four occasions to discuss shoreline zoning issues, and opportunities for coordination and consistency between communities. The sessions were facilitated by Dean Solomon and MSU Extension County Director Emeritus Rod Cortright. Jen Gleb from Tip of the Mitt Watershed Council served as a resource person for one session. The products of the process were reports detailing study group recommendations and specific language that each community could use to implement the recommendations. Hard copy and pdf final reports were distributed to each of
the participating communities. Participants responded positively to the opportunity to discuss common concerns and frustrations.

Training programs were held for Lake Charlevoix Ambassadors, reaching 33 individuals, including all 18 Lake Ambassadors. The sessions included discussion on the following topics:

- Project background and goals
- What Lake Charlevoix shoreline owners think (review of shoreline owners' survey)
- Lake Charlevoix water quality status update
- The regulatory environment
- Key lake issues: shoreline buffers & natural shorelines, stormwater management, landscape maintenance, invasive species, septic systems

Presenters included Dean Solomon (MSU Extension), Chris Anderson (MSU Extension), Kevin Cronk (Tip of the Mitt Watershed Council) and Dan Myers (Tip of the Mitt Watershed Council). Each participant received a packet of selected background information to be used as reference materials as long as they remain an Ambassador, which was packaged in a durable folder and identified so that the packet can be handed down from Ambassador to Ambassador.

Training attendees responded very positively to the training program, reporting they found the program very useful, that they were confident to answer basic questions about shoreline and water quality protection, and that they were confident to refer other shoreline owners to local resource people and web sites.
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.

» **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 Breastfeeding Initiative (BFI)** impacted and served 110 participants in Charlevoix & Emmet counties in 2012. In both counties, the initiation rate of breastfeeding in participants was 100%. Of the 51 Charlevoix County participants, 46% continued breastfeeding through the first year of life, dramatically impacting the long term health (as studied) of both mother and baby.

Emmet and Charlevoix counties are now being served fully and will continue to be through September 2014 under a special research grant funded by the Kellogg Foundation. Outreach is expected to escalate and has, and services are now being expanded to offer regular classes to the WIC population allowing for more impact in our community.
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 Charlevoix County, 347 adults and 292 youth were reached through nutrition education classes at various venues in the county. There were a total of 2,167 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. Charlevoix 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 Walmart 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 has greatly been expanded in Charlevoix 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 Charlevoix County farmer’s markets though Project FRESH and Market FRESH. These coupons are redeemed at the farm market for over $4,200 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.
Health & Nutrition Educational Programs

- 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.

In January, the first Cooking Matters for Child Care Professionals class was offered in Charlevoix County in collaboration with Great Start to Quality Resource Center. Of the 14 area child care professionals that signed up, all 14 graduated from the program by attending at least 4 of the 5 two-hour classes. The class combined facilitated discussion with a nutrition instructor and hands-on meal preparation with a culinary professional. One of the focal points of the class was to learn how to encourage healthy eating behaviors in children and involve children in the kitchen and food preparation activities. At the beginning of the class, there was significant skepticism about using the healthier recipes as well as a distinct resistance to having the children involved in the kitchen. At the end of the class the participants reported that they loved the hands-on recipe preparation and take-home groceries because it encouraged them to try new or healthier recipes with the children that they would have avoided before the class. Despite their hesitation, most reported that over the course of the class they were surprised at how many new things the children tried and liked! Additionally, most said that they were now considering involving the children in kitchen activities in some capacity and that they were brainstorming ways to incorporate food exploration activities to introduce new foods!

» 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.
Food consumers can have increased confidence seeing cottage food products sold by someone with a food safety certificate related to producing cottage foods because of proper ingredient handling and product labeling.

As a result of attending the cottage food law workshops:

- 96% of participants indicated more frequent handwashing as a result of the class.
- 95% of participants reported increased knowledge on how to prevent cross contamination.
- 97% of participants reported increased knowledge of when it is not safe to prepare food.

Residents have increased confidence in consuming home preserved foods because of increased knowledge of safe preservation practices and research-based resources.

As a result of attending the food preservation workshops:

- 98% know where to locate research based/tested recipes for home food preservation.
- 98% will follow research based/tested recipes when canning food at home.
- 90% will properly use processing techniques to safely can low and high acid foods.
- 100% will use correct processing times to safely can low and high acid foods.
## Extension Educators Serving Charlevoix County

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