Manistee County

2012-2013 Annual Report

Message From the District Coordinator

MSU Extension (MSUE) in Manistee County continues to provide local educational programming and impacts to meet Manistee 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 Manistee 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

2012 Participation Numbers

4-H Children & Youth programs ................................................................. 417
4-H Members (Traditional Club Enrollment) ................................. 161
4-H Adult Volunteers ................................................................. 79
4-H Youth Volunteers ................................................................. 23
Short Term/Special Interest Participants .................................... 154
Agriculture & Agribusiness ................................................................. 912
Greening Michigan programs ................................................................. 454
Health & Nutrition programs ................................................................. 1,726
Total .................................................................................................. 3,509

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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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Manistee 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. Manistee County 4-H currently has an enrollment of 162 youth in 19 clubs. These clubs are supported by 82 adult volunteers throughout the county. Under the direction of 4-H staff, local events and activities are planned and supported by five Manistee County 4-H developmental groups: the Manistee County 4-H Advisory Council, the Manistee County 4-H Livestock Council, the Manistee County 4-H Companion Animal Committee, the Manistee County 4-H Horse Show Committee, and the Manistee County 4-H Speed & Action Committee. Together, they collaborate 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.

» The 4-H Junior Master Gardener Program is our newest program, offered at KND schools. In the spring of 2013, 35 fifth grade students engaged in a six week program that focused on soil evaluation, plant biology, the seed germination process, pollination, and plant hydration and nutrition. The goal of several of these students is to become active in some of Manistee County’s farm and garden businesses.

4-H Junior Master Gardener classmates assist their Healthy Self club leader with a seed germination activity.

» 4-H Exploration Days at MSU provides teens with the opportunity to experience a bigger world outside of their local communities. This three-day event, held in late June at the Michigan State University campus, simulates college life for over 2,400 4-H youth from all over the state. This year, 11 youths and 2 adults from Manistee county will be attending the event,
with financial assistance from the 4-H Advisory Council. The theme for 2013 is “Share the Magic of 4-H!” The youth and their chaperones will live on campus, experience dorm life, and attend a variety of classes and other educational events. Some of the sessions that Manistee youth have been confirmed to attend this year include: Goat Management, Equine Welfare Assessment, Competitive Horse Judging, Introduction to MSU’s School of Veterinary Medicine, Farm Biosecurity, and Working with K-9 Search and Rescue Dogs.

» **The Manistee County 4-H Advisory Council** supports 4-H staff with a number of programs directed at 4-H youth, including: the 4-H Ambassador selection process, the annual award of the Manistee County 4-H Advisory Council Scholarship, the Manistee County Land Atlas and Plat Book, annual 4-H Member and Volunteer Recognition awards, and oversight of the other four developmental groups. The 4-H Ambassador selected for the 2012-13 program year is Kaylan Fitch. In April of 2013, the Advisory Council launched the new 24th edition of the plat book. Proceeds from the sales of The Manistee County Land Atlas and Plat Book are the major funding source for this council. This book is valuable in promoting local tourism through attractive “collector” cover photographs of Manistee county landmarks and a calendar of annual Manistee festivals and community events. Sales records indicate that even Manistee County property owners living in neighboring states purchase the book, which adds to a widespread tourism exposure. Enhancements for the 2013 book include the addition of information on the six villages in the County, the City of Manistee, and Little River Band of Ottawa Indians tribal government. Additionally, ten new county events and two tribal events were added to the calendar of annual events page.

Members of the Northwoods Kids 4-H Club have completed the installation of US flags along Main St. in Onekama in honor of veterans.
The Manistee County 4-H Livestock Council assists 4-H staff with events and activities that focus on animal science and education. The livestock council is comprised of 2 teens and 3 adults from Benzie County and 2 teens and 5 adults from Manistee County. The premier event carried out by this group is the annual 4-H Livestock Auction at the Manistee County Fair. In August of 2012, the auction celebrated its 32nd year with a sale featuring 138 animals and 42 donated items. With 97 buyers participating, over $87,000 was raised. A total of 5% of those proceeds goes back to the Livestock Council for ongoing support of its programs, and another portion goes to other 4-H councils that were designated proceeds from certain donated items sold. However, the majority of the money raised goes back to the 4-H members, who report that it is used for back-to-school needs and college funds. At the 2012 auction, figures indicate that 41 of the registered buyers were Manistee County businesses. Local businesses report that the publicity received in the printed auction program and through public announcements at the event itself, and later in October at the auction appreciation banquet, help to increase their business. Honor State Bank is also an integral part of the annual event and has served as auction cashier since 2005.

The Manistee County 4-H Companion Animal Committee supports 4-H staff with the promotion of companion animals and the ways in which they are important to youth development, especially for those who do not have the resources or ability to engage in horse and livestock projects. This group helped to sponsor the successful 4-H Leader Dog school programs in the past and continues to lend support to puppy raisers in Manistee and Benzie counties. In past years, the 4-H Leader Dog school programs were delivered to thousands of students at various Manistee County schools. In an effort to tailor the program needs to fit the reduced schedule of the 4-H program coordinator, the group now focuses on the Leader Dog educational presentation at the Manistee County Fair. This event raises public awareness on the needs of visually impaired individuals and how these specially trained animals make normal life a possibility for them. Another fair week offering produced by this group is the Companion Animal interviews event. Last year at the fair, three 4-H youth from Benzie county and nine 4-H youth from Manistee County participated in the interviews event, and more than 80 people attended the Leader Dog session at the fair.
The Manistee County Speed & Action Committee and 4-H staff work together to produce an annual series of horse events that focus on “gymkhana” skills. “Gymkhana” is another name for “equestrian games” that focus on speed and precision in a variety of timed course patterns and races. The Gymkhana term, used primarily in Eastern United States, is close in origin and meaning to the Native American word “Omoksee,” meaning “games on horseback,” used primarily in western U.S. regions. Although this event occurs at Rockin’ R Ranch in Manistee County, it is a true collaboration of Benzie and Manistee County 4-H. A great deal of support comes from the Benzie Animal Control officer and others associated with the Benzie Mounted Sheriff’s Division and animal rescue efforts in that county. In summer of 2012, a total of 12 Manistee 4-H youth and 6 Benzie 4-H youth participated in the series of five competitions and the awards event. The Extension office receives regular feedback that these events also increase tourist commerce in the Bear Lake area because the visitor numbers increase at Rockin’ R and surrounding businesses.

The Manistee County 4-H Horse Show Committee deserves the majority of credit for producing the annual 4-H Horse Show at the fair, as well as 2 educational clinics in the summer. 4-H staff lends assistance with monthly meeting planning and agendas and the production of the horse show program. At the 2012 fair, 3 Benzie 4-H youth and 21 Manistee 4-H youth participated in the 4-H Horse Show.

The Manistee County Fair is a week long summer event in which youth participate in a variety of events and competitions that showcase the various talents and skills they have worked to perfect during the 4-H program year. Though this fair is not designated as a “district” fair, it also plays host to Benzie County 4-H youth, as they do not have a fair in their home county. In 2012, 42 Benzie 4-H youth and 103 Manistee 4-H youth participated in animal showmanship events; various exhibits and competitions with a focus on science, the arts, horticulture and agriculture; a “live performance” event; the 4-H Horse Show; and the 4-H Livestock Auction.

Some of the 2012 Manistee County Fair 4-H Livestock Grand Reserve trophy winners.
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 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.
Agriculture & Agribusiness Educational Programs

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 Schweihofe and published on the MSU Extension News website:

- “Antibiotic residue testing in meat results in few positive samples” Jeannine Schweihofe
- “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 area 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. The updated oil and gas web page is accessible to anyone at [http://msue.anr.msu.edu/program/info/oil_and_gas](http://msue.anr.msu.edu/program/info/oil_and_gas).

- **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.

- **Income tax and cash flow planning in December** — Four commercial farms produced an average positive change of $26,937 in their economic situation from this program. 100% of the attendees reported the workshops have improved their understanding of farm accounting principles and methods.

- **Cropland leasing consultation** — For the district as a whole, approximately 16 producers were counseled and given printed information about cropland leasing and lease rates.
**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, attended by county, township and city officials from Manistee County. Manistee residents also attended the Citizen Planner Advanced Academy on “Placemaking” at MSU. 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: ORV’s and tourism, mining issues, roads, equalization, health care, statewide ballot issues 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.

» **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 42 one-on-one counseling sessions to local businesses, aided in the launch of a new business in Manistee County, and had the following estimated economic impact on the county:

- Increased annual sales: $45,000
- Value of increased investment: $15,000
- Jobs created: 2; Jobs retained: 2

» **Michigan Firewise Program** — Michigan, like much of the nation, is seeing increased wildfire activity resulting from complex array of factors including past land management practices, development and climate change. Initiated in Manistee County in 2005, the Michigan Firewise Program continues to assist homeowners, communities, fire departments and government officials with how to manage the increasing wildfire threat and
Greening Michigan Educational Programs

keep our homes and communities safe from wildfire. With the knowledge that we can no longer prevent or extinguish all wildfires, the Firewise Program, (a collaboration between the U.S Forest Service, Michigan DNR, National Firewise program and MSUE) works to create a cultural change in our understanding and acceptance of fire. Teaching large populations about “living with fire” requires an ongoing and broad commitment. Elaine Bush, who manages the Firewise program statewide, and Jed Jaworski, an experienced former state and federal wildland urban interface fire fighter, both work out of the Manistee County Extension Office with the program.

This past year in Manistee County the program continues its service to the Manistee County Community Wildfire Protection Plan or “CWPP”. The project has completed much of the demanding GIS mapping work and is currently working with the county's fire departments. With over 1/4 of fire fighter deaths now occurring in wildland /urban interface fires, and 80% of fire departments across the nation reporting challenges with these types of fires, the work is timely and important. Jaworski has conducted a number of trainings for Manistee County firefighters based on the National Fire Protection Associations “Wildland / Urban Interface Fire Fighter Safety Series” which is designed to keep fire fighters working safely and effectively in these types of fire events. Jaworski also serves as an evaluator with county emergency exercises, in part to gain an understanding of the County’s emergency response capabilities and help fashion the CWPP to best meet the counties needs.

“Firewise on the Farm” is a new initiative created out of the Manistee MSU Extension office to better serve the specific needs of area agriculture with regard to fire safety and fire management on the farm. This initiative helps those working in agriculture understand Michigan’s agricultural burning laws and guidelines, use fire safely and productively, and protect farms and agricultural economies from negative fire impacts. Jaworski is a member of the Northwest Michigan Migrant Resource Council to better serve agricultural interests and area minorities that may be at risk, as well as attending meetings of the Benzie / Manistee Farm Bureau. He has also exhibited at the Farm Labor Conference, the Orchard & Vineyard Show, Buckley Farm Show, MSU Agriculture & Natural Resources Week and Northern Michigan Small Farms Conference.
Ongoing Firewise public education efforts continue with both exhibits and programming as well as some new initiatives. Working with the Land Information Access Association or “LIAA” based in Traverse City, the Firewise program will now produce audio visual content at LIAA for broadcast on local cable access (TV-2) as well as other venues, reaching audiences numbering in the hundreds of thousands. This year Firewise programs will also be conducted regularly at area State parks. Regionally the Manistee office has presented / exhibited with the Michigan Botanical Club, the Northwest Michigan Solid Waste Council, Wexford and Muskegon Public Safety Expos, MSU Grandparents University and AG Expo, Preserve Historic Sleeping Bear, the Grand Traverse Regional Land Conservancy, Mason County Home Expo, Mason County MSU Extension open house, and Ludington State Park to name a few. Locally at the Manistee County Fair, Business Expo, Safety Expo, County Summit, West Shore Medical Center Auxiliary, Household Hazardous Waste Collection Day, Arcadia F.D. Open House, Fire Association / Fire Chiefs meetings and Township meetings.

As mentioned above, Bush devotes the majority of her Firewise time to coordinating the statewide program. She does provide educational presentations and/or displays locally as her schedule permits. This past year, Bush made presentations to Kaleva Headstart, Manistee branch AAUW (American Association of University Women), at the annual meeting of the Manistee Conservation District, at a statewide meeting of tribal health directors that was held in Manistee County, at New County Commissioner training in Gaylord, and at a Northern Michigan Counties Association meeting in Grayling.

Resilient Coastal Communities & Economies — Mark Breederland continued to educate, coordinate and respond on issues with low lake levels and impacts to communities. He co-hosted a meeting in Onekama in December 2012 for small ports with significant attendance from MDEQ, MDNR and the US Army Corps of Engineers. Many sectors are impacted with lake level conditions and regulatory issues with the state of Michigan and United States Army Corps of Engineers often surface. MI Sea Grant continues to track levels and has been heavily involved in working with the state of Michigan to help meet the needs of coastal communities.
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.

» **Building Strong Adolescents** is a Michigan State University Extension authored program for parents and guardians of teenagers. The program focuses on the external and internal assets teens need to succeed, along with focusing on integrating issues related to the prevention of aggression and violence. During 2012, this 10-year-old curriculum was revised and updated to be used in addressing current needs and will be available in 2013.

» **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 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 Manistee County, 540 adults and 1,140 youth were reached through nutrition education classes at various venues in the county. There were a total of 5,650 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. Manistee 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 Manistee County reaching new adults and youth.

MSUE provided nutrition education on the benefits of including fruits and vegetables in their diet provided to these participants increased the quality of their diet by purchasing locally grown fresh fruit and vegetables from Manistee County farmer’s markets though Project FRESH and Market FRESH. These coupons are redeemed at the farm market for over $12,350 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.

“An elementary student’s mother commented to me how much her daughter enjoyed and learned in the MSU Extension SNAP-Ed classroom visits. The student has been involved with this program from Pre-School through 5th grade. Last summer, the student planned and helped make her healthy birthday party, including recipes from SNAP-Ed.”

~ Cyndi Jacobi, SNAP-ED Program Instructor

“I am cooking more and finding that eating healthier isn’t as expensive as I thought. My family is enjoying trying the new recipes I have learned.”

~ Cooking Matters class participant
Health & Nutrition Educational Programs

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.

» **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. During 2012, there were 46 Food Preservation events held statewide reaching 681 people.
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