Macomb County

2014 ANNUAL REPORT

Message from the District Coordinator

In 2014, MSU continued to work to advance prosperity for the people of Michigan. Through the work of Extension and AgBioResearch, MSU continues to play a key role in the \$101 billion food and agriculture system through partnerships, research and educational programs in all of Michigan's 83 counties. All of these great resources are made possible through our partnerships with county stakeholders who provide support for Extension programming. This support is vital to our delivery of quality programming and resources and ultimately, vital to the quality of life for the residents of District 11 and especially Macomb County.

- Your support of MSU Extension 4-H Youth Development allows over 6,600 Macomb youth per year to learn lifelong skills, develop leadership abilities and discover the value of community service.
- Your support of MSU Extension allows residents to learn about the safety, security and
 affordability of local fresh foods, how to use them, where to find them, or how to start a cottage
 food business of your own.
- Your support of MSU Extension nutrition and physical activity programs allowed over 3,500 Macomb County residents to improve the quality of their diets and become more active.
- Your support of MSU Extension contributes to the health and growth of Michigan's economy
 by: providing research and discovery of alternative, renewable and manageable energy
 resources; providing financial and employee management programs to farmers and landowners;
 and helping farmers learn more efficient production practices.
- Your support of MSUE Extension and the MSU Product Center allows entrepreneurs learn to develop and launch new businesses that provide new products and services for everyone.

The <u>MSU Extension</u> web site contains a large number of informational articles, a calendar of events, an Expert Search, and a bookstore stocked with MSU Extension bulletins, soil test kits and many more resources. Check it out today!

Sincerely, Richard Wooten, District Coordinator

2014 Macomb County Participation NumbersChildren & Youth6,675Volunteers576Natural Resources & Sea Grant5,388Volunteers307Financial Stability & Community Development1,298Community Food Systems796Agriculture, Agri-Business & Horticulture490Master Gardener Volunteers246Master Gardener Program Participants6,952Nutrition, Health & Wellness3,564Total26,242

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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CHILDREN & YOUTH



The value of volunteer's time working with youth is \$22.14 per hour according to the Independent Sector, a Washington-based coalition of foundations, corporations and nonprofit organizations.

Michigan State University Extension's Staff and volunteers worked with 12,444Macomb County youth during 2014 with specialized programs in 4-H Youth Development, mentoring, natural resource education and activities, and nutrition education. 6,675 of these youth were involved in 4-H programs. The other 5,769 were involved in natural resources or nutrition programs.

4-H Youth Development

MSU Extension's 4-H Youth Development Program is designed to uniquely prepare Macomb County's youth to meet today's challenges and prepare for tomorrow's. It provides developmentally appropriate opportunities for participants aged 5-19 to experience life skills, practice them until well learned, and to apply them when necessary throughout their lives. Programs provide hands-on learning opportunities across the county through 4-H clubs, after-school programs, school enrichment programs, and local, state, and national events. During 2014, MSU Extension staff recruited, trained and provided oversight to 560 adult and 16 teen volunteers. These volunteers delivered 4-H educational programs focused on life skills, science literacy, leadership and civic engagement, and workforce preparation throughout Macomb County. At an average of 5 hours per week, Macomb volunteers provided 149,760 hours of service to 4-H youth in 2014.

The Armada Fair is a large part of the Macomb County 4-H community. It is a weeklong event where youth take care of livestock, answer questions about their projects and volunteers monitor the barns. During the two cleanup events (prior to the fair) there were over 50 volunteers that assisted for 4 hours giving a combined total of around 200 hours of community service. The 2014 Sunday Fair Judging (judging of non-livestock) had 180 youth entries.

The Michigan 4-H China Art Project, conducted in cooperation with the People's Republic of China, is a global education program that often uses the arts for both in-school and after-school learning experiences. It takes place every year in the spring. An educational kit is offered to elementary youth K-6 in clubs and in schools. Last year there were six Macomb schools and one club which participated with a combined 1847 youth. It is a Global Cultural Experience where youth exchange art as a means of communication

despite language barriers.



While the interests of club members expand and change throughout the years, currently there are many active clubs with a variety of project areas to keep youth in the county learning and developing. MSU Extension staff strive to support project areas and ideas that develop youth financial and science literacy, entrepreneurship, leadership and civic engagement, and life skills. These skills assist them to identify career choices and successfully enter the workforce. An interesting variety of project areas are available to challenge Macomb youth. Fifty-three clubs totaling 982 members have multiple project areas including but not limited to the following:

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- Animals have been 4-H projects since clubs were established. There are active clubs for
 projects for youth to grow, maintain, handle and train horses, rabbits, beef, swine,
 sheep and goats. Raising goats has developed into an entrepreneurial exercise as well.
 One club has an online store that sells goat milk products: soaps, lotions, and cheese.
 Small animals such as dogs, cats, rabbits, birds and poultry are particularly popular in
 urban areas.
- Outdoor education and recreation is another popular interest area. Shooting sports
 provide training in safe handling and equipment care in archery, riflery and muzzle
 loaders. The Dresden Outdoor Adventure Challenge Club engages in outdoor activities
 such as kayaking and spelunking as well as environmental science.
- Science and technology projects are popular and include rocketry and robots, entomology and bees, veterinary science, horticulture and gardening.
- Community service and volunteerism are 4-H goals that are reflected in club focus areas. These activities not only help communities but build life skills such as public speaking and organizational development that can be used throughout life.
- Creative projects are like bread and butter to these youth. Woodworking, industrial arts, stained glass, photography, painting, and expressive arts develop interests in future hobbies or careers as well as coordination and self-esteem.

4-H Youth Mentoring

The 4-H youth mentoring program serviced 29 youth through community, peer, and group-based mentoring programs in 2014. Various mentor-pairs allow unique opportunities for interaction and reach more at-risk youth keeping them connected with their families and out of residential placement. This year, there were several opportunities for mentors and youth to get involved in community service in Macomb County, including organizing a volunteer opportunity at Gleaners Food bank, in which 4-H Tech Wizards

and 4-H clubs were invited to attend. The youth who participated in this program know they will always have someone to talk to when needed, as well as have the opportunity to participate in new activities. In 2014 the 4-H mentoring program assisted with the peer mentoring program at Academy of Warren. The middle school youth (7th and 8th



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graders) mentored the elementary youth (4th and 5th graders) on becoming middle school students and alleviated some of the stressors they might have.

Macomb youth participated in the 4-H Mentoring Weekend, a statewide short term, special interest program at Kettunen Center, the Michigan 4-H Foundation volunteer training facility near Cadillac, Michigan. They were exposed to canoeing, shelter building and team building activities that helped them strengthen their mentoring relationship and gain confidence

4-H Tech Wizards Mentoring Program

2014 marked the fourth year of the 4-H Tech Wizards program in Michigan. Programming for small-group mentoring took place in Mount Clemens, Warren, New Baltimore, and Harrison Township. Youth engaged in hands-on science, technology, engineering and math (STEM) projects while building strong relationships with their mentors. Mentor matches met weekly throughout the year. The participants also traveled to 4-H Mentoring Weekend in July. The 4-H Tech Wizards youth, mentors, and staff hosted a recruitment table and "reverse engineering" breakdown site at The Maker Faire at the Henry Ford Museum in Dearborn, Michigan. Youth utilized various tools to disassemble and reassemble donated laptop computers as a day-long experiential learning project. In the fall, a new AmeriCorps full-time service member joined the 4-H Tech Wizards team to continue the recruitment of youth from military families throughout Macomb County. In the fall, all 4-H Tech Wizards youth and their mentors from Macomb, Oakland, and Wayne Counties met for a symposium and celebration of the youth projects at The Belle Isle Nature Conservancy. In October, the 4-H Tech Wizards groups participated in the 4-H National Youth Science Day project 'Rockets to the Rescue' with millions of other 4-H youth worldwide. 4-H Tech Wizards sites celebrated Computer Science Education Week in December by participating in the national coding movement titled "An Hour of Code." Each youth experienced writing computer code at www.code.org and earned certificates for completion of their coding. The 4-H Tech Wizards program is funded under the National Mentoring Program Year IV Grant awarded by the National 4-H Council through the Office of Juvenile Justice and Delinquency Prevention and included assistance from Mentoring to Access Corps (MAC). This Michigan Nonprofit Association institution enrolled and placed three full-time AmeriCorps members to serve youth mentoring programs through MSU Extension 4-H

"It (4-H Exploration Days) has made me think about how I will handle my time management, personal life, and the things that I want to experience all in one!." – a Macomb County Exploration Days participant.



Tech Wizards sites in Macomb, Oakland, and Wayne counties. By the end of 2014, thirteen trained mentors at the four 4-H Tech Wizards sites—L'Anse Creuse Middle School Central, Anchor Bay Middle School South, Mt. Clemens Middle School and The Detroit Tank Arsenal Child Development Center—served 26 youth. This network of sites, along with its strong community partnerships and statewide programming resources, will help the 4-H Tech Wizards continue to grow and provide opportunities for youth to connect with STEM professionals.

4-H Exploration Days

The 45th annual statewide 4-H Exploration Days Conference was attended by 63 Macomb County youth from 11-19 years of age. This pre-college, three day event is held on the campus of Michigan State University annually and is designed for youth to sample residence hall life while they attend educational sessions, experience personal growth and explore careers and personal options for their future.

Two research-based tenets provide the foundation for this residential program's 30 intentional contact hours: youth development and experiential education. More than 200 action-filled classroom and field trip sessions were offered throughout MSU's campus and at various off-campus



locations. Sessions were taught by 67 MSU faculty/staff, 91 adult volunteers, 18 teen volunteers and 67 non-MSU resource experts. A wide variety of session content areas are available each year. Examples of those offerings include: Veterinary School: Is it for you?, Digital Story Telling, Small Engines, What's on the Menu for Birds of Prey, Photoshop Basics, Basic Web Design, and What is 4-H Entrepreneurship?

When not in session, these participants were engaged in meetings, tours of the campus as well as social and campus activities. In the conference evaluation 76% indicated that Exploration Days influenced their desire to attend MSU, and 94% planned to attend college.

4-H Great Lakes and Natural Resources Camp

4-H Great Lakes and National Resources camp takes place each year at a residential camping facility. This year, 67 teens ages 13-15 from 37 Michigan counties including four representatives from Macomb County, were exposed to 70 intentional

contact hours. The content and instructional methods are research-based (environmental education, place-based education, experiential learning and youth development). The diverse, natural resources-rich area includes lighthouses, a marina, a national marine sanctuary, coastal wetlands, dunes, a limestone quarry, diverse watersheds, and a state park.

While sessions at the MSU Extension 4-H camp covered ecological concepts such as fisheries management, wildlife, invasive species and limnology, recreation was also an integral part of the learning. Campers could try kayaking, sailing, or snorkeling — experiencing new fun activities responsibly in the outdoors. Evening programs focused on team building, environmental policy and empowering youth participants to take active roles in leadership situations.



CHILDREN & YOUTH



2014 surveys showed increased interest in science, environmental stewardship, and college readiness: 94% planned to attend college, 87% were more knowledgeable about career opportunities in environmental fields and 79% increased their knowledge of different majors, career paths and opportunities at MSU.

Youth Financial Literacy

Seven financial education programs servicing 240 youth in Macomb County and SE Michigan were offered during 2014. These programs included Mad City Money, Spartan Dollars and Cents, High School Financial Planning Program (HSFPP) and Bonzai.

Mad City Money is a financial education simulation where young people get a taste of the adult world complete with jobs, income, family and debt. During the three-hour program, youth visit merchants to select housing, transportation, food, household necessities, clothing, daycare, and other needs while building a budget for their simulated family. Mad City Money allows participants to make mistakes and suffer the consequences of their decisions in a realistic, but safe environment. Mad City Money was delivered to 184 youth including youth aging out of foster care, residents of the juvenile justice system, and youth from limited income families. This program was offered in collaboration with Extra Credit Union and over 40 adult volunteers served as various merchants.

Bonzai is a computerized financial education program where youth go through 30 real life scenarios while managing a budget. This program was delivered to 50 high school students participating in a Workforce Investment Act summer employment program.

Spartan Dollars and Cents is a budgeting game that teaches participants to prepare a usable budget. Participants receive an occupation with salary. The challenge is to complete a lifestyle questionnaire while staying within their income. To add to the excitement, unanticipated life occurrences are incorporated into the game. This program along with High School Financial Planning Program materials from the National Endowment of Financial Education were used with fifteen military youth involved in the "Get Hired" program.

Evaluation results received from participants of these programs indicate that 97% plan to save regularly to achieve their goals and 91% agreed that as a result of the program, they plan to use a system such as a budget to track income and expenses.

Youth Entrepreneurship

Entrepreneurship Academy was a camp in Macomb County where 46 youth took a full Saturday to engage in activities to teach them the basics of entrepreneurship. Seven local young existing entrepreneurs shared their expertise about product pricing, target markets, advertising, distribution, customer service, sales and social entrepreneurship. At the end of the program, youth sharpened their public speaking skills by presenting their team business plan to the panel of entrepreneurs.

Be your Own Boss- Youth Farm Stand was a week-long camp held at the MSU Tollgate Center during the summer. This program involved 21 youth who learned about community food systems, gardening and entrepreneurship. As part of the program, youth interacted with guest speakers during the week and a variety of entrepreneurs on a field trip to Detroit Eastern Market. At the conclusion of the program, youth opened three farm stands and made over \$400 in profit.

Creating a Youth Farm Stand was a curriculum designed in order to train adults, teachers and community members interested in enabling youth to develop and operate a youth farm stand. This training was offered at the MSU Tollgate Center in March. Eleven adults attended this program.

Youth Career and Workforce Preparation

This year, Macomb County-based Extension staff facilitated 6 career sessions at Exploration Days. A total of 133 students participated in these pre-college career sessions which were all 5 hours in length. Additional career preparation program highlights include:

- Secured grant funding in the amount of \$14,408 to train teachers, volunteers, youth development staff and parents in the use of the *Build Your Future* curriculum.
- Offered 3 sessions of the *Interviews For Success* Program, reaching 93 participants
- Inaugural year of the 21st Century Workforce Skills program including two pilot sessions serving 31 students in Macomb County
- New partnership with Macomb Community College entitled Career Exploration Through College Exposure. 46 middle school youth from military families participated
- Piloting of a new statewide *Build Your Future Curriculum Training* with 16 attendees, 9 of whom were from metro-Detroit.



Natural Resources

MSU Extension has a mission to raise awareness and increase the understanding of our natural resources. Serving a total of 5,388 Macomb residents this year, Extension provided a number of programs, throughout southeastern Michigan, to encourage good stewardship among youth and adults, of our valuable natural resources.

Michigan Sea Grant Education Programs

Michigan Sea Grant, a program of MSU Extension and the University of Michigan, fosters economic growth and protection of Michigan's coastal Great Lakes Resources with support from the National Oceanic and Atmospheric Association (NOAA). Throughout 2014 Michigan Sea Grant held a wide variety of programs or assisted with numerous projects in Macomb County including the following.

-Great Lakes Education Program

Natural resources staff including Justin Selden, Steve Stewart and Terry Gibb implemented the 2014 season of GLEP. This year, classroom and vessel-based field experiences introduced 1,456 students from Macomb County accompanied by 307 adults to the Great Lakes and Lake St. Clair. The first part of the program began in the classroom with teachers utilizing the GLEP curriculum. The program included the integration of history, geography, physical and biological sciences, math, literature and the arts to increase student interest in natural resources and encourage understanding of their role as environmental stewards. These activities focused on water, land, people and life, to

familiarize students with the lakes and their ecosystems.

The second phase is a field experience aboard a 65 foot Coast Guard-certified boat which is converted into a floating classroom known as the "Schoolship." Onboard, students engage in exploration of the physical, chemical, cultural and biological dimension of the Great Lakes watersheds, specifically the Detroit River and Lake Erie. They experience hands-on activities such as weather observation, navigation, marlinespike and marine knot-typing, bottom sampling, plankton sampling, dissolved oxygen experiments, pH and carbon dioxide experiments, water clarity and color testing.

Participating school districts included L'Anse Creuse, Mount Clemens, Utica, Warren Consolidated, Warren Woods and others from surrounding counties.



-Summer Discovery Cruise

For the 2014 program year, informal learners were, once again, able to learn about the Great Lakes by participating in the Summer Discovery Cruise series, a unique opportunity to advance Coastal Urban Ecotourism throughout Southeast Michigan. During the summer, 71 cruises involved 1,589 learners from multiple Michigan counties, including 765 participants from Macomb.

Sea Grant educators, partnering with Lake St. Clair Metropark and Lake Erie Metropark marinas, conducted educational cruises that provided physical and informational access to Lake St. Clair and the St. Clair River



delta. Twenty-three types of cruises were offered in 2014: Nature; Lake St. Clair History; Great Lakes Science for Teachers; Lighthouses; Shipping Out; Journey through the Straits; Aliens Among Us; Night Watch; Eagle's Eye; Nature; Birds, Boats & Booze; Eco Art; Shipwreck and Sugar, Warfare on the Waterfront; and, Handy Billy. Partnering with other environmentally concerned groups provided Sea Grant educators the opportunity to offer Wetlands & Wildlife, with the MDNR; Fisheries, with MDNR; Shipwrecks! With DTE energy; ROV Adventures with DTW Energy partners; Detroit River Revival with U.S. Fish & Wildlife Service partners and, Wind, Waves & Weather with the National Weather Service.

-Lake St. Clair Fisheries Workshop

On April 15, 2014 Sea Grant Extension conducted a Lake St. Clair Fisheries workshop at the VerKuilen Building Auditorium. There are several fisheries workshops held annually throughout the state by Sea Grant Extension, and this workshop added a much-needed focus on Lake St. Clair.

-Great Lakes Stewardship Initiative

During the summer of 2014, MSU Extension, Michigan Sea Grant, the Southeast Michigan Stewardship Coalition and the Northeast Michigan Great Lakes Stewardship Initiative offered the second of three annual professional development opportunities for educators from southeast and northeast Michigan. During the four-day workshop, 20 educators began their journey learning about the Great Lakes resources through place-based education and stewardship, developing inter-regional relationships in the context of Great Lakes literacy and implementing their knowledge and skills in their home school district.



-Educator Professional Development

One highlight of this year's professional development opportunities was the Great Lakes Conference. This conference has served as a Professional Development Best Practice for K-12 and informal educators since 2006. This year, 50 educators were sponsored by an EPA/GLRI grant to attend the conference and participate in the Educator Luncheon. Topics addressed at the 2014 conference ranged from lake trout and whitefish stocks in the Great Lakes, to hypoxia, microplastics, Asian carp, invasive Phragmites, and Great Lakes Areas of Concern. This conference represents an effective way for educators to learn about emerging issues and the latest Great Lakes research findings. In addition to the science presentations, teachers can interact with the scientists, and learn new skills or participate in curriculum activities transferable to their classrooms.

The 50 educators who participated this year ranged across the K-12 grade spectrum and informal education institutions, and all were able to enhance their content knowledge and strengthen connections with the Great Lakes research community. As part of the Educator Luncheon, they completed a "Best Practices of Great Lakes Literacy Education" survey, the results of which will be shared with the group and used to enhance future professional development opportunities. They were also able to learn about additional professional development opportunities relating to Great Lakes Literacy that will be offered through Michigan Sea Grant Extension in 2015.

Macomb educators also participated in the 2014 Lake Huron Place-Based Education Summer Teacher Institute in northern Michigan . Teachers that attended worked with leading Great Lake scientists, Michigan Sea Grant educators from MSU Extension and MSU Department of Fisheries and Wildlife faculty and other experts in the field.

Center for Great Lakes Literacy

Working in conjunction with the support of an EPA-funded grant of \$100,000, Extension professionals worked to create the Center for Great Lakes Literacy. The project provides a focus on land-based, hands-on learning experiences for teachers, informal educators, and other adult learners engaged in environmental stewardship.

To date, several educational activities have taken place to enrich the lives and teaching resources of the educators involved. Alongside Great Lakes scientists, twenty enthusiastic teachers have hiked schoolyard wetland habitats, investigated invasive species, explored water quality in the Thunder Bay River watershed, sampled aquatic food webs from invertebrates in the river to Lake Huron fish populations, and explored marine archeology and maritime history.

The Lake Huron Place-Based Education Summer Teacher Institute offered a chance for educators to get their feet wet with Great Lakes science experiences while learning about place-based education (PBE) strategies and best practices. One goal of this experience was to advance Great Lakes literacy or a better understanding the Great Lakes

and our interconnections with these water resources. Another goal was to help enhance student learning and involvement in Great Lakes stewardship.

Groundwater Education

First implemented in 1993, Macomb MSUE has offered an "Understanding Groundwater" educational program for youth and adult audiences. In 2014, 353 participants took part in learning and understanding groundwater basics, such as what it is, how it's used, its connection with surface water and how to protect this important resource. Using the Groundwater Simulator Model, students and adults participate in a hands-on learning experience to acquaint them with the information and increase retention of groundwater concepts.



Macomb County Blue Economy Initiative

During 2014, MSU Extension employees participated in the Macomb Blue Economy initiative in a number of ways. Educators provided assistance and consultation to the Water Resources Advisory Council and HEART Freshwater Laboratory. Extension also provided a Citizen Planner Advanced Academy presentation, entitled Placemaking with Blue Assets for Success in a New Economy.

In addition to these efforts, Extension also used the initiative as an opportunity to promote Summer Discovery Cruises as well as other watershed related programming.

Board of Michigan Science Teachers Association Awards MSU Educator Informal Science Educator Award

In 2014, the board of the Michigan Science Teachers Association (MSTA) announced that Steve Stewart was selected as the 2015 Informal Science Educator. The winner was chosen for unique and extraordinary accomplishments, active leadership, scholarly contributions and direct and substantial contributions to the improvement of non-school-based science education over a significant period of time. Employed by Michigan State University Extension since 1977, Steve is a senior educator with Michigan Sea Grant Extension, currently working in Macomb County.

Steve helped develop Sea Grant Extension's 4-H Great Lakes Camp in 1983, co-founded the Great Lakes Education Program which has served more than 100,000 students and teachers since 1991, developed the Summer Discovery Cruises program in 2002, and was a co-founder of the regional Center for Great Lakes Literacy, which focuses on providing professional development opportunities for K-12 teachers and informal educators.

Steve was honored at an awards ceremony during a special dinner at the 2015 MSTA Conference in February 2015.



Personal Finance and Housing

As Michigan continues its rebound from recent fiscal difficulties, Michigan State University Extension has worked extensively with communities around the state to provide literature, workshops and programs to help Macomb County residents become financially stable in multiple ways. Entrepreneurship, financial literacy and mortgage education are just a few of the ways that MSU has provided services to Macomb County.

During 2014, MSU Extension offered 49 financial literacy and housing education workshops or individual counseling sessions to 1,298 Macomb County residents. MSU Extension's financial literacy and housing education programs provide unbiased information in financial education programs which help reduce fraud in the market place, rewards quality businesses and help families provide capital for the economy by saving and spending appropriately. Participating in educational housing courses can reduce mortgage defaults and increase the likelihood of asset preservation among homeowners. Stable housing ownership is a foundation for a healthy community and the county tax base in Michigan.

Home Preservation and Foreclosure Prevention



As a HUD and MSHDA Certified Counseling Agency, MSU Extension Home Ownership staff was able to provide 329 Macomb County residents seeking assistance to prevent foreclosure of their primary residences with foreclosure prevention counseling during 2014. Of client cases involving mortgage delinquency statewide, 59% were able to keep their homes and get back on track with their mortgages and 2% were able to sell their homes to avoid foreclosure.

In addition, the Macomb Treasurer's Office has partnered with MSU Extension for another year to provide assistance to 207 homeowners facing foreclosure due to unpaid tax bills. The Macomb Step Forward program paired these homeowners with MSU Extension certified housing counselors and they were able to receive assistance in completing the required paperwork to enroll in the program.

Pre-Purchase Home Buyer Education

The MSU Extension's Pre-Purchase Home Buyer Program helped Macomb County homebuyers make affordable and informed choices prior to the purchase of a new home. Through a combination of this six-hour seminar and several other presentations throughout the year, 474 prospective homebuyers were provided with guidance to save money for a down payment and to learn of mortgage products that offer down payment assistance in 2014.

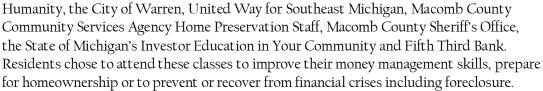
The home-buyer education program also provided certificates of completion for residents seeking Michigan Housing Develop Authority (MSHDA) down payment assistance. The program helped participants improve credit scores and financial standing which assisted eligibility for lower-cost mortgages and increased the likelihood that

troubled borrowers would not have to seek foreclosure assistance. Prospective homebuyers also received certificates good towards 4% of the purchase price of a Freddie Mac home to use for closing costs.

Personal Financial Education

In 2014, MSU Extension staff presented Money Management Education programs to III Macomb County residents. MSU Extension utilizes two evidence-based curriculums, *Dollar Works 2* from the University of Minnesota Extension and *Money Smart* from the Federal Deposit Insurance Corporation. Program delivery ranged from a one-hour session to a 16-hour series.

These sessions were made possible through ongoing partnerships with Macomb Habitat for



MSU Extension also offers an online money management course that's available 24/7. *eHomeMoney* is a low-cost, online course that helps people understand credit, manage their personal finances and prepare for purchasing a home at their own pace. This program has also provided a venue for those who have difficulty traveling or leaving their homes.

All Macomb County residents have access to eXtension, including the "Ask an Expert" widget. These national resources assist consumers in getting expert answers and help from Cooperative Extension staff, university faculty and volunteers from across the United States.

Building Entrepreneurs

According to the U.S. Census Bureau, small businesses make up 89% of all U.S. firms. 61% of these are micro-enterprises headed by individual entrepreneurs or partnerships. Because of these figures, Michigan State University and MSU Extension has recognized the need for providing research-based education to develop knowledge and skills of Michigan entrepreneurs.



Entrepreneurship Education:

Michigan's youth are filled with creative and passionate ideas that could easily become booming business ventures. To help youth understand that these ideas can turn into business plans and future careers, MSU Extension provides a variety of resources to support young entrepreneurs and the adults who work with them. Entrepreneurship Education highlights included:

- Creating the next Generation of Entrepreneurs—18 adults were in attendance
- Implementing Entrepreneurship Academy A new program was developed this year with 17 adults in attendance
- Be the "E" Developed and implemented a new statewide curriculum training with 11 attendees.
- Provided support/guidance/workshops to three youth groups interested in starting a
 business involving 31 youth and 17 adults.



Connecting Entrepreneurial Communities Conference:

Macomb County educators sought to strengthen community support for entrepreneurs and were actively involved in organizing a statewide conference focusing on Connecting Entrepreneurial Communities (CEC) that was held in East Tawas, Michigan on October 8th and 9th. At the 2014 CEC conference, 120 people attended representing 34 counties, 54 communities and included 7 people from out of state. The evaluation summary of this conference showed 96% of participants increased their knowledge of business concepts, tools, and resources to build

entrepreneurship in their community and 95% of participants increased knowledge of youth entrepreneurship resources and programs. Furthermore, 96% of the participants plan to create/expand at least one community-based entrepreneurial activity and initiative to present at the conference in the next year.

Highlights of the conference included:

- 2 key note speakers
- 23 breakout sessions embedded in the community
- A networking river cruise.

Macomb Placemaking Summit

Taking place on June 9, the Macomb Placemaking Summit attracted nearly 100 people, from citizens to elected officials to county organizations and agencies and students. An Executive Committee and Steering committee were convened to assist in development of the summit and promote participation in the event. The morning was spent learning about place, demographic shifts and their impact on community and economic development.

One of the biggest challenges after getting all the key stakeholders to the table, was to get everyone up to the same common level of understanding on the local economy, economic development and regional placemaking issues. In order to reach consensus on the strategies and commitment to implement them, it was essential that everyone had the same common understanding before creating strategies for moving forward. This required training for all the participants. This training and funding for the summit was provided through the MiPlace Partnership curriculum.

The afternoon was spent identifying local and regional assets and strategic placemaking. Participants working in groups were asked to identify and prioritize strategic opportunities for placemaking efforts.

MSU Extension's continuing role included following up with the Executive Committee to identify next steps which included obtaining current placemaking type efforts already in existence throughout the county. This will help the committee to develop new initiatives and provide enhancements to existing efforts



Citizen Planner Program

Macomb MSUE offered its bi-annual Citizen Planner program in spring, 2014. Citizen Planner is a seven-week training for local elected and appointed officials, community planning staff, and interested citizens. Local, regional and state experts taught sessions that included: Introduction to Planning and Zoning, Legal Foundations of Planning, Planning and Zoning: Roles and Responsibilities, Plan Implementation and Development Controls, Best Management Practices for Innovative Planning and the Art of Community Planning through Effective Meetings and Conflict Management. Ten participants from 8 Macomb communities and 1 Oakland community participated in the program. Post-program evaluations indicated increases in knowledge on all program topics.

Proposal 1 of 2014 Education

Proposal 1 of 2014 was the business personal property tax change put on the November ballot. This proposal proposed important changes in local finances that would impact local community and school revenues. An MSU Extension educator in Macomb and Public Policy Specialist from campus developed a "white paper" outlining the specific points of this legislation and the impact on different groups if the proposal passed or failed which was available statewide.

In addition, a PowerPoint presentation was developed and delivered to the Macomb Assessor's group to assist in clarifying this ballot issue since it would impact their work. Twenty-four assessors attended the informational session. The materials were distributed to other Extension staff for presentations.

Community Food Systems

A sustainable community food system integrates food production, processing, distribution, consumption, and waste



management in order to enhance the environmental, economic, and social health of residents. Farmers, consumers, and communities partner to create a more locally-based, self-reliant food economy which improves access for all community members to an adequate, affordable and nutritious diet. Accomplishing this requires a food system with a dynamic blend of local, regional, national and globally-produced good food, as well as consumers who understand and utilize the benefits such a system can provide.

MSU Extension's Community Food Systems work group has developed several initiatives to promote consumer awareness and understanding of what "good food" is through nutrition education, providing community education on food systems, support for institutions that wish to source locally, and assistance developing and expanding markets where locally grown foods can be accessed.

During 2014, 796 people from Macomb County attended workshops, presentations or worked one-on-one with a MSU Extension educator on understanding and developing community food system components.

Macomb Food Collaborative

The Macomb Food Collaborative works to ensure access to safe, fresh, fair and healthy food for all, promote a vibrant, local food economy, sustainability and good nutrition through education, outreach and support.

Hosted by the Macomb Food Collaborative, the All About Food Conference was held in February of 2014. The conference was supported by MSU Extension, a member in the Collaborative, and convened food system stakeholders from around Macomb County, with additional participants from surrounding counties, including Oakland, St. Clair and Wayne. Educators, farmers, farmers market vendors, consumers and food business owners were represented in the 120 attendees.

The keynote address was given by Lisa Diggs, the founder of the "Buy Michigan Now" campaign. She inspired and encouraged the audience to commit to buying Michigan products. The conference evaluation demonstrated that she shared valuable resources on how to purchase Michigan food, where 34% of those that responded said that they were more aware of how to purchase food grown in the state.

Other sessions were offered on a wide range of topics, including gardening, food business development, marketing, nutrition and cooking. The conference evaluation showed that 89% of attendees were going to make changes to their food business or food at home based on what they learned at the conference.

The Macomb Food Collaborative continued to engage community members around issues of food throughout the year. The group hosted quarterly education meetings that 76 community members attended. The events featured various speakers who shared their knowledge and



COMMUNITY FOOD SYSTEMS

experience on engaging youth in the food system, resources for food businesses and increasing food access. For the first time, the Collaborative also hosted two Macomb Food Fairs to showcase small, Macomb County based food businesses. The vendors shared samples and sold their products to 250 participants.



Farm to Institution

Farm to Institution is a holistic approach to building the regional food system by providing foods that are nutrient dense to students and patients, an economic benefit to

local growers, and a more connected food community. The MSU Extension Community Food Systems work group supports institutional purchasing of local products by providing support and resources to growers, distributors and purchasers to advance these efforts.

In Macomb County, MSU Extension provided one-on-one counseling to institutional purchasers and growers to assist with increasing sales and purchases of local fruits and vegetables. Support was also provided for special events to highlight Michigan produce. In one instance, a local school food service director held a lunch tasting of kohlrabi, a late season vegetable. Over 350 students sampled the local kohlrabi and learned about its nutritional value.

The Michigan Farm to Institution Network, in which MSU Extension is a member, hosted an educational tour of Macomb County's Blake Orchards. This tour attracted 16 participants to gain in-depth insight about how fruits are grown locally by a multi-generational farm business. As a result of the tour and relationships built, a number of the food service directors that were present voiced interest, and followed through on purchasing products from this local orchard.

Horticulture

In 2014, 8415 Macomb County residents were served, directly or indirectly, by MSU Extension Horticulture programs. Extension strives to answer the questions that every gardener will have at some point. The MSU Horticulture staff has developed several tools and programs to address all of the needs of the local gardener and landscaper.

- The Toll Free Lawn and Garden Hotline (1-888-678-3464 or 1-888-MSUE-4MI) staffed by MSU Extension consumer horticulture educators and Macomb County Master Gardener volunteers, assisted 559 Macomb residents with their questions in 2014.
- Gardening in Michigan website at <u>www.migarden.msu.edu</u> houses resources

tailored for beginning and experienced Michigan gardeners with sections that focus on vegetables, fruit, flowers, trees and shrubs, lawns and soil. The web site has fact sheets for each subject area and has 30 online gardening classes and topic-specific videos. Over 1,500 visits were recorded by Macomb residents during 2014, with people visiting an average of 2.8 pages per visit.

- Soil Test Self-Mailer and Soil Test Interpretation Website

 (www.msusoiltest.com) With increased interest in home garden soil testing, MSU

 Extension offers an easy-to-use soil test self-mailer kit coupled with a userfriendly soil test interpretation site. Thirty-five boxes for commercial growers
 were purchased from the Macomb Extension office and 111 self-mailers were
 processed through the lab at MSU. The soil test kit can be obtained online from
 the MSU Extension Bookstore (http://www.bookstore.msue.msu.edu/product/soil
 -test-kit-selfmailer-1116.cfm) or from the local county MSU Extension office for
 \$25.
- Ask an Expert: The <u>Gardening in Michigan</u> and <u>MSU Soil Testing</u> websites feature an Ask an Expert widget where gardeners can electronically submit questions to horticulture experts at land grant universities across the nation. During 2014, 29 Macomb residents took advantage of this offer to ask questions. To contact an expert in your area, visit http://expert.msue.msu.edu, or call 888-MSUE4MI (888-678-3464).

Master Gardener Volunteer Program

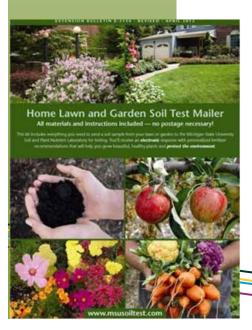
MSU Extension offered its first Master Gardener Volunteer Program in 1978. Today, more than 30,000 residents across Michigan have earned and enjoyed the Master Gardener Volunteer designation. The program serves two functions:

- To provide instruction in basic, research-based horticulture science to motivated and active gardeners through an adult educational program offered through MSU Extension.
 - To provide MSU Extension with trained gardeners who will educate others in the community about environmentally and economically sound practices through horticulture-based volunteer activities.

During 2014, the Master Gardener program saw 171 volunteers recertify for the year with 75 new volunteers trained. Upon completion of the educational component and 40 hours of volunteer service, the Master Gardener trainee will receive his or her Master Gardener Volunteer certification.

As part of their continued volunteer work within their communities, these 246 Master Gardeners provided 10,380.4 hours of volunteer time in Macomb County during 2014, equivalent to \$234,078, according to the Independent Sector's value of volunteer time. Examples of their efforts include:

- Providing assistance at community gardens that provide fresh food for needy families in Southeast Michigan at community gardens.
- Providing diagnostic services for 143 samples from Macomb residents.



Health, Nutrition & Wellness

MSUE-Macomb County Nutrition Education and Physical Activity Team delivered programs to youth, adults and elderly adults to promote and encourage healthier eating and a more active lifestyle. 3,564 Macomb County residents were served through these programs.

Youth Nutrition Education

1302 youth participants were engaged throughout the Macomb Intermediate School District during 2014. Students participated in a six-week long educational series. Each session of the series lasted 45-60 minutes and met once a week. The researched-based curriculum that was used to teach the students was called Show Me Nutrition. This curriculum is age appropriate and is taught at each student's grade level. All youth programming focuses on lessons that are interactive and appeal to a wide variety of learning styles. Many of the activities are hands-on and each lesson has a book that accompanies it, to reinforce literacy. Topics covered are food safety, positive body image, world hunger, physical activity and general nutrition. Children were also able to taste fruits, vegetables and other healthy nutritious recipes like berry smoothies, and were involved in physical activity to encourage a more active lifestyle. Macomb County public schools involved included Carver Middle School, Clintondale Middle School, Mt. Clemens High School, Parker Elementary, Siersma Elementary School, Fillmore Elementary, Rainbow Elementary, Smith Elementary, Kent Elementary, and Endeavor Elementary.

Adult Nutrition Education

A total of 853 adults enrolled in nutrition education courses held throughout Macomb County. As with the youth program, this program was offered in a series of six installments. Adult participants chose from a menu of curricula including the following:

- Eat Healthy Be Active— A research/evidence based-curriculum that is aimed at an audience from 9th grade to adults. These lessons are interactive and can be tailored to specific audience needs (I.E Limited cognitive ability, increased fiber, etc.) Topics covered include food safety, label reading, stretching food dollars, physical activity, and general nutrition and include food demos and taste testing. Participants are also given educational incentives to help them put into practice what they have learned in their classes.
- Eat Smart Live Strong—A research/evidence based—curriculum that is geared towards adults that are 55+ years of age and older. This dynamic series focused on fruits and vegetables and physical activity. It is customized specifically for older adults and offers a variety of exercises and recipes that are easy to duplicate. Food demos and samples are included to all that participate in the program series.

MSU Extension
Program Instructor
Tiffany Stevens
celebrates with a
client who has
completed the 6 week
Eat Healthy Be Active
Course.



HEALTH NUTRITION & WELLNESS



Cooking Matters presentation in Oxford Square Cooperative, Clinton Township

• Cooking Matters— A nutrition series that lasts 2 hours, meets weekly, has a nutrition instructor and chef that help participants make healthy food choices, incorporates physical activity in their daily lives. Groceries are given at 4 classes so that recipes can be duplicated by participants at home.

One adult participant, who was enrolled in the Eat Healthy Be Active series, quickly put the knowledge and skills she learned in the nutrition classes to work, helping her overweight child lose over 15 pounds during the course of 6 weeks series. She stopped purchasing pop and sweetened beverages and helped her child to learn to select healthier foods. This participant also reported she stopped making separate special meals for her children and instead, focuses on providing her family with healthy balanced meals and gives everyone at least one healthy option to select from what is served.

Another participant attending a Cooking Matters for Adults series came back to visit the nutrition instructors after the program was completed and reported she has become a big fan of spinach and has incorporated new vegetables into her family diet and cooking.

Nutrition Education Presentations

Adults and youth who did not participate in a six-week series had other opportunities to get exposed to nutrition education through educational presentations held throughout the year. Total number of participants for all presentations was 1618 people. Educational sites included churches, non-profit agencies, senior resident facilities, senior feeding sites, health expos, farmers markets, food pantries, summer food programs, various faith-based institutions and non-profit agencies specializing in services for refugee populations that include ACCESS and Lutheran Social Services.

Food Safety

Demand for wholesome locally grown food is rising. With food preservation being a cost-effective way to have nutritious, locally grown food year-round, MSU Extension food safety education programs meet the increased demand and provide consumers knowledge of the enhanced state food laws for safe foods. These food safety programs attended by 1,854 Macomb residents, help prevent foodborne illness and ensure a safe food supply for consumers.

 Food Preservation Instruction — During 2014, food preservation workshops held in Macomb County, trained 1,818 residents on the selection of high-quality food to preserve and safe methods of preserving it. A food preservation class for deaf and/or blind participants in August was the first of its kind delivered in Michigan by the MSU Extension Food Safety work team. To reach this audience for food preservation programming, Extension Educator Eileen Haraminac coordinated efforts with MSU Extension staff, agency interpreters and ten deaf or blind participants of the class for a successful completion of criteria and objectives.

- ServSafe Foodborne infections are a major public health concern in the U.S., causing
 48 million illnesses and over 3,000 deaths each year according to the Centers for
 Disease Control and Prevention. MSU Extension offers ServSafe, a national
 certification program for those working in food service businesses, especially managers
 and other leaders. MSU Extension ServSafe staff delivered three training sessions
 during 2013 that 13 Macomb County residents attended.
- Cottage Food Law MSU Extension provided Cottage Food Law classes attended by 23 participants from Macomb County who planned or considered starting a food business. After the class ended, all participants reported they better understood what is necessary to run a successful cottage food business; 86% reported being able to legally produce and a sell favorite food item under the cottage food law as a result of the program; 80% improved cleaning and sanitizing procedures; and 68% understand procedures for verifying refrigeration of foods at 41 degrees.

Social and Emotional Well-being

In 2014, 137 people from Macomb County attended the MSU Extension well-being programs noted below.

Community-Based Nurturing Parenting

Research shows that babies who receive affection and nurturing care from their caregivers have the best opportunities for healthy development. Community-Based Nurturing Parenting is for parents, grandparents, childcare providers and others who care for children from birth to teens. Participants learn what nurturing is and how to be a nurturing parent; to enhance positive relationships with children; to discipline without spanking; methods to handle stress and anger; child growth and development; to

understand the brain development of children and teens; and, how to help build self-esteem. This program is an evidence-based program for caregivers to strengthen and build parenting skills that promote positive family relationships. Last year in Macomb County, 16 families participated in this program.

Building Strong Adolescents



Be SAFE Safe, Affirming & Fair Environments

The MSU Extension Building Strong Adolescents (BSA) program served parents with 16-18 year old children in the Michigan Youth Challenge Academy across Michigan. Three lessons from the BSA curriculum and a session on MyPlate describing how eating affects a child's stress, helped parents understand at-risk youth who had dropped out of school. Eleven families from Macomb County

participated in this program.

Bullying Prevention

MSU Extension's *Be SAFE: Safe, Affirming and Fair Environments* initiative, provides adults with opportunities to explore and connect around bullying issues. It is designed for adults who live with, care about and work with young people, including parents, caregivers and those who work in schools, youth and family agencies, youth organizations, juvenile justice, faith-based communities, recreation departments and other community groups.

The ABC's of Bullying Prevention program shares perspectives on the prevalence and types of bullying behaviors, examines bullying, bias and harassment through the lens of differences and explores strategies for addressing the issues. The Be SAFE: Addressing Bullying in Out-of-School Settings webinar series covered Helping Kids Connect with Their Emotional Resiliency, Trauma Reaction to Bullying: Voices from Kids with Autism Spectrum Disorders and Exploring and Preventing Cyberbullying.

RELAX: Alternatives to Anger

Chronic stress is a major issue for many Americans and has been proven to lead to a variety of health problems. Stress affects us on a cognitive and emotional level. It can affect the part of the brain that has to do with decision-making, keeping us stuck in unhealthy behaviors. Those experiencing chronic stress are more likely to eat high-fat and sugary foods, increasing the risk for becoming overweight and developing obesity or diabetes. Stress can cause long-term health problems such as high blood pressure, muscle or joint pain, shortness of breath, diseases such as fibromyalgia, digestive problems, heart disease, and can alter blood glucose levels.

RELAX: Alternatives to Anger is designed to help adults, parents, teens and caregivers increase their knowledge about stress and anger issues. Participants put healthy relationship skills into practice by better managing emotions. 57 residents in Macomb County took advantage of this program during 2014.











Managing Diabetes

According to the Centers for Disease Control and Prevention, about 35% of adults have pre-diabetes but many do not know it. In Michigan during 2012, more than 9% of adults were diagnosed with diabetes, an estimated 701,000 people. In addition, 364,400 Michigan adults are estimated to have undiagnosed diabetes. With these statistics in mind, MSU Extension staff have worked to provide education resources.



Highlights from 2014 include:

- Dining with Diabetes- This is a 5-week series for people with diabetes and their family members. Each week for four weeks participants examined a different aspect of nutrition as it relates to diabetes. Participants received recipes and were able to sample dishes prepared by the instructor. The fifth session is a follow-up, taking place two weeks later, featuring a topic chosen by the participants.
- Personal Actions Toward Health (PATH)- These workshops feature a curriculum developed at Stanford, where they are referred to as Chronic Disease Self-Management Programs (they are referred to as PATH in Michigan). Each is about 2½ hours a week for 6 weeks.
- Diabetes PATH– Developed at Stanford, this Personal Actions Toward Health series focuses on living a healthy lifestyle with Diabetes
- National Diabetes Prevention Program (NDPP)- This is a year-long program for people who have been diagnosed at-risk for developing diabetes. Participants met once a week for 16 weeks, then once a month for 6-8 months.

Managing Chronic Pain

An additional MSU Extension PATH program was conducted at the Village of Peace Manor in Clinton Township for eight Macomb County residents. PATH for Chronic Pain is a workshop for people experiencing chronic pain and their family members or caregivers. It enhances regular treatment by giving participants the skills to coordinate what they need to manage their health and stay active. Participants who completed this six-week reported increased energy, decreased frustration about health problems, improved relationships with others and increased time spent exercising as well as increased confidence in managing their condition and keeping it from interfering with everyday living.

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2014 MSU Connections Macomb County

Macomb County students enrolled at MSU3,069
Veterinary medicine students 83
Medical students 172
Medical internships & residencies 283
Alumni in the Macomb 12,832
Spending with local businesses \$6,188,033
Financial Aide disbursed\$21,516,134
Product Center-value of increased investment \$6,030
Estimated total economic impact\$137,023,439



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