

Oakland County

2015 ANNUAL REPORT

MESSAGE FROM THE DISTRICT COORDINATOR

In 2015, Michigan State University Extension has continued a tradition of delivering quality educational programs and services to county residents. Our continued presence in Oakland County means that in 2015, over 9,000 youth from Oakland County had the opportunity to participate in 4-H and other youth development programs. Through our Master Gardener/Consumer Horticulture Programs, almost 15,000 Oakland County residents had the opportunity to learn new gardening techniques and best practices. By providing these programs as well as a plethora of impactful resources and initiatives, MSU Extension has solidified its place as a vital part of this extraordinary community. Having recently completed a series of focus groups through our Issues Identification process, we look forward to further focusing our mission and program plans to be able to provide all of the very best services we have to offer in order to meet the needs of Oakland Residents.



Sincerely,

Richard Wooten

District Coordinator, District II

CONTACT US

MSU Extension Oakland County

1200 North Telegraph Rd.
Building 26 East, 2nd Floor

Pontiac, MI 48431

248-858-0880

Garden Hotline
248-858-0902

msue.msu.edu/county/info/oakland

Tollgate Education Center

28115 Meadowbrook Road
Novi, MI 48377

248-347-3860

tollgate.msu.edu

MEASURING IMPACT

4-H Youth Development	9,187
Volunteers	763
Health Nutrition & Wellness.....	9,932
Natural Resources	1,624
Volunteers	27
Community Food Systems/Food Safety.....	2,582
Community & Financial Development.....	1,237
Product Center.....	183
Master Gardener/Consumer Horticulture Programs	14,984
Volunteers	651
Garden Hotline	1,239
TOTAL IMPACT	42,409

Oakland County Extension Leadership Council:

A.C. Alrey—Council Chair

Michelle Arquette-Palermo

James Brueck

Darryl Buchanan

Georgette Johnson

Chandra Jones

Faith Jones

James Lloyd

Tom Middleton—County Commissioner

Allen Sorgenfrei

DEVELOPING YOUTH AND COMMUNITIES

Increasing Youth Capacity

Michigan State University Extension staff and volunteers worked with 9,187 Oakland County youth in 2015. MSU Extension reached these youth through specialized programs that included, but weren't limited to, 4-H Youth Development, nutrition/healthy living programming and education, mentoring and STEM programs.

4-H Youth Development

More than 20% of the U.S. population is between the ages of 5 and 19. These youth look to adults for guidance. As youth become more involved and gain maturity, they tend to look for ways in which their voices can be heard. This youth voice is a major resource that often goes untapped in communities. MSU Extension provides training and opportunity through 4-H programming for the development of youth-adult partnerships and gives participants the chance to consider the value of these partnerships in the decision making process. Through 4-H, youth are gaining life skills such as leadership, planning and teamwork, while adults are gaining information about the needs, concerns and issues that pertain to youth.

In 2015, MSU Extension staff recruited, trained and provided oversight to 695 adult volunteers and 68 teen volunteers. These volunteers delivered 4-H educational programs focused on life skills; science literacy; leadership and civic engagement; and workforce preparation throughout Oakland County. Those volunteers assisted 44 active 4-H Clubs in Oakland County during the year, and participated in the delivery of educational experiences. These clubs are established to focus on one or more shared interest of the members as described below.

4-H Club Programming

While the interests of club members expand and change with time, there are currently many active clubs with a variety of project areas to keep youth in Oakland County learning and developing throughout the years. MSU Extension staff strives to support project areas and ideas that develop youth's financial literacy, 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 Oakland County youth. The 768 youth members of the 44 community based 4-H clubs are involved in multiple project areas including, but not limited to, the following:

When you support MSU Extension 4-H programs, youth participants learn life skills that prepare them for the workforce – especially for highly sought after jobs in science, technology, engineering and mathematics (STEM).



From monthly family workshops and in-school science lessons to after-school technology training and classroom gardening, MSU Extension supplies schools and families with the support they need to be successful.

In the United States today, many job openings for science, technology, engineering and mathematics (STEM) - related positions go unfilled due to a lack of qualified applicants.

Developing Youth and Communities, continued

- » Animals have been 4-H projects since 4-H clubs were first organized over 100 years ago. There are clubs with activities for youth to grow, maintain, handle and train horses, rabbits, cattle, swine, sheep, dogs, poultry and goats.
- » 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 they help build life skills such as public speaking and organizational development.
- » Creative projects such as woodworking, industrial arts, stained glass, photography, painting and expressive arts develop interests in future hobbies and careers as well as coordination and self-esteem.

These clubs are located across Oakland County, from Davisburg to Southfield, Novi to Royal Oak, youth are involved in on-going life skills development in their 4-H clubs.

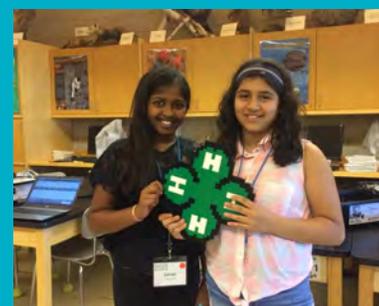
Supporting STEM Careers Through Youth Programming

The future of Michigan lies, in part, in the hands of its students' abilities to excel in science, technology, engineering and mathematics (STEM). Science literacy among school-aged youth in Michigan is below the national average, directly impacting college readiness. In the United States today, many job openings for STEM related positions go unfilled due to a lack of qualified applicants.

MSU Extension provides resources aligned with Michigan science education standards to teach confidence, leadership and responsibility related to STEM. Michigan 4-H encourages youth to participate in programming during the summer to continue to develop skills in unique, non-traditional education settings. STEM programs included:

- » National Youth Science Day events that took place in various places around the county and reached more than 100 youth.
- » 4-H Eco-Challenge Summer Day Camp, which is now in its sixth year, took place at Indian Springs MetroPark and provided opportunities for 26 youth ages 11-18 to explore and understand the challenges of invasive species and how to manage them.
- » Super Science Outreach was a "travelling science roadshow" that made presentations and hands-on science demonstrations at various locations around Oakland County, including libraries and county parks. Super Science Outreach programming served over 600 Oakland county youth in 2015.
- » The 4-H Tech Wizards Mentoring Program is a statewide program, now in its sixth year. The program seeks to pair STEM professionals with at-risk youth and generate

MSU Extension provides resources aligned with Michigan science education standards to teach confidence, leadership and responsibility related to STEM.



Developing Youth and Communities, continued

interest in future stem careers. The program currently takes place at Webber Media Arts Academy, Owen Elementary and Alcott Elementary schools. In 2015, 15 adult mentors supported 68 youth in Pontiac.

4-H Youth Development Sponsored Events

Throughout the year, 4-H provided several opportunities to reach out and interact with the public. These events serve two purposes; one, to show off all of the fantastic projects and hard work that 4-H youth have devoted themselves to and second, to invite others to join, either as volunteers, youth participants or sponsors. Examples include, but are not limited to:

- » **4-H Discovery Day** - The Oakland County 4-H Program and the Oakland County Fair Board have worked together for more than 30 years to bring awareness of and encourage participation in the Oakland County Fair. One of the most successful strategies has been 4-H Discovery Day which takes place at Springfield Oaks every April. During this event, 4-H clubs display various projects they have been working on or learning about and members of the public are invited to sample some of the projects and activities that 4-H has to offer. This year, a total of approximately 500 Oakland County residents were in attendance, getting up close and personal with animal demonstrations, shooting bows on the archery range, launching model rockets and sampling the many baked goods and other snacks provided by various clubs.
- » **Oakland County 4-H Cloverbud Camp** - In its first year, Oakland County 4-H Cloverbud Camp offered active play to 17 youth ages 5-8. This three-day experience provided a positive and collaborative atmosphere where youth could practice communication, sharing, and teamwork. The camp met at Waterford Oaks County Park's Lookout Lodge and participants experienced engaging activities like trips to Paradise Peninsula playscape, crafts, nature hikes, chemistry projects, and more.
- » **4-H Exploration Days** - 99 Oakland County youth and volunteers participated in Exploration Days at MSU's campus. Youth from all over the state gathered on campus to spend three days and two nights taking mini-classes in everything from veterinary science and canoeing to business management and fashion. This pre-college program helps youth imagine themselves in a college setting.

MSU Extension programs such as the Michigan 4-H Youth Conservation Council (M4-HYCC) allow Michigan's youth to get involved and become community leaders, but also show them how to be engaged in the legislative process.



MSU Extension provides resources aligned with Michigan science education standards to teach confidence, leadership and responsibility related to STEM.

Developing Youth and Communities, continued

Tollgate Farm Programs

Through MSU Extension 4-H, Tollgate youth participants learn life skills that prepare them for the workforce – especially for highly sought after jobs in science, technology, engineering and mathematics (STEM).

Tollgate Summer Science Camps

"They were filthy every day and what a joy that was to see!" Tollgate summer campers enjoyed an experience in discovery science and natural resources exploration.

Along with the highly popular Green Science Adventure Camp, several new themes were piloted: Bug, Survival, Dirt, Water, Animal, and Food Camp. Through core farming activities, campers engaged in hands-on STEM design projects exploring the sustainable, nutritional, and cultural aspects of agriculture.



- » In addition to pinnacle summer camp experiences of archery, canoeing, horseback riding, and hiking, youth explored food system awareness by gardening, cooking with produce they harvested, and caring for the farm animals.
- » By learning alongside Tollgate's strong and enthusiastic educational team of certified teachers, environmental educators, and youth mentors, campers gained a deeper understanding of where their food comes from and left camp empowered with skills for self-directed, learning.
- » Eight weeks of camp brought more than 400 kids to Tollgate this summer, expanding offerings to give all age groups a chance to participate on the farm.

Classroom Success Through Field Trip Programming

This year Tollgate led over 35 field trips for grades K- 11. Staff connected field trip subject matter to classroom learning by first receiving information from teachers and organizers about the subjects and units being taught. Field trips were then customized to emphasize life cycles, vocabulary, apiology, or other subject matter. Field trip program curriculum is founded in state educational standards Throughout the field trip, staff ask questions to informally assess learning and link experience to class work.

- » *Maple Sugaring in March* - cultivates systems thinking as participants trace maple sap to syrup. Students engage in science as they tap maple trees, observe processes in the sugar shack, compare the taste of sap and syrup, and explore historical sugaring tools.

"It was a great day! Tollgate Farm is my all time favorite field trip of the year!"
*Mike Thomas,
Ferndale Elementary
Teacher*



MSU Extension offers social, recreational and educational opportunities to connect military families with local resources and support, as well as predictable, safe and nurturing environments for military youth to unite with others facing the same challenges.



Developing Youth and Communities, continued

- » *Spring into Farming* in April and May - involved two tracks this year: *Baby Animals* and *Nutrient Trail*. *Baby Animals* is structured for young learners and uses concrete experiences with animals to learn purpose, anatomy and life cycles. Teachers may choose 4 stations to structure their own *Nutrient Trail*. Typically students engage in compost, farm animal, and educational gardens tracks to experience the interdependency of farm systems.
- » *Harvest Farm Ecology* in October - focuses on life cycles of pumpkins, apples, and farm animals. Students harvest apples to press into cider and pick edible pumpkins to take home.

Spotlight on Scholarships

We are grateful to the Americana Foundation and other corporate partners for the support that they provide to our scholarship program. Throughout 2015, we made every effort to make our programs accessible through transportation assistance and individual scholarships. They were used for every season, and especially during summer camp. \$3690 in scholarships were awarded with a total of \$2538 going to schools and \$1,152.50 to camp families

Traveling Programs

Not only do groups and individuals come to Tollgate, but we also take our message to the community. This year, six programs were presented to over 350 people, ranging from environmentally-focused school clubs to local libraries to the Michigan Science Center in Detroit, MI. The traveling programs were focused on animals and were great venues for introductory activities.

October is “Farm to School” Month

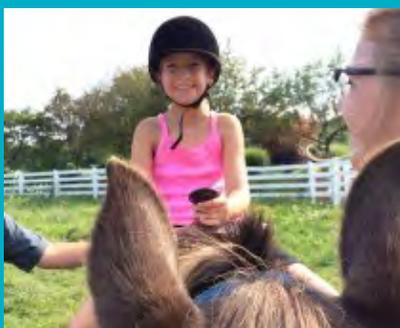
The work of the MSU Extension Farm to School collaborative started this summer. Tollgate joined thousands of other schools and community organizations in the nationwide “apple crunch” activity. Tollgate implemented apple taste tests to concretely connect local and seasonal food to students ranging from kindergarten to high school. This gives students a chance to consider the wide variety of apples available. Research shows that, equipped with more information about fresh produce, youth tend to choose healthier lunch options in the school cafeteria and participate in weekly family shopping trips to the grocery store. Tollgate is working to transform eating habits by equipping visitors with understanding and inspiring change.

Engaging Teens in Mentorship and Stewardship

2015 saw the launch of the Tollgate Farm Camp Stewards and Stewards in Training (SIT) program for youth ages 13-19 to serve as mentors and role models for younger campers. They had the unique opportunity to build their own career portfolio while practicing leadership skills. SIT's, as 12-15 year old junior stewards spent their days as part camper, part apprentice to the staff, helping to lead games and activities. The older teens, ages 15-19, honed their leadership skills and served as role models for campers and SIT's. These unique relationships between teens and campers became a great strength of camp.



MSU Tollgate 4-H youth participants learn life skills that prepare them for the workforce – especially for highly sought after jobs in science, technology, engineering and mathematics (STEM).



"Fantastic program -- so important. Especially with the increased use of technology, this type of camp is even more relevant and important to keep running!"

ENSURING SAFE AND SECURE FOOD



MSU Extension educating residents about safe and secure food leads to a healthy population, which in turn helps keep health care costs in check and our communities viable.

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 encourage a locally-based, sustainable 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. During 2015, 258 people from Oakland County attended educational events, workshops, presentations or worked one-on-one with a MSU Extension educator on understanding and developing community food system components.

Teaching Residents About Food Safety

Food Safety is a concern of many. It has become a public health priority as it commonly presents challenges. Each year, approximately one out of six Americans are stricken with food borne illness. Of these, 128,000 must be hospitalized and 3,000 die as a result of foodborne disease. While the costs of foodborne illness are great, in most cases, foodborne illness is preventable through education.

In Oakland County, food safety education was presented in many venues during 2015. Over 2,500 residents, including more than 800 youth, participated in presentations, and workshops focused on educating people on food safety. Presentations were made in schools to educate young children on the importance of hand washing to prevent not only foodborne illness but to promote general health. This four lesson curriculum also taught the importance of washing fresh produce before consumption, temperature controls for food and keeping food safe while away from home.

Participants in MSU Extension's Cottage Food Law workshops reported:

- » 46 percent will now sanitize surfaces before preparing food, in addition to 54 percent who already practiced this.
- » 46 percent of participants learned how to properly prevent food cross-contamination; 54 percent were already using safe food cross-contamination practices.
- » Participants documented that, because of MSU Extension Serve Safe and food safety workshops, they are careful to wash their hands and to keep countertops clean when preparing foods.



In 2015, nearly 4,000 Michigan residents learned about preserving food and preparing safe food for public consumption.

Ensuring Safe and Secure Food, continued

Reducing foodborne illnesses

Food preservation is both a popular hobby and a small business opportunity, but people who preserve food without following scientifically proven food preservation techniques increase the risk of foodborne illness. Several years ago, a survey conducted by the National Center for Home Food Preservation found that many food preservers still follow the out-of-date practice of open kettle canning. Because of the risk of foodborne illness, including botulism from failure to use safe home-canning techniques, it is important to continue to provide up-to-date guidelines for safe home food preservation.

In 2015, MSU Extension taught more than 90,000 Michigan residents about safe food practices. As a result of MSU Extension food safety programs, individuals now use safer food handling, preparation, storage and preservation techniques. This reduces medical expenses, reduces food recalls and contributes to the financial stability of food businesses. This benefits other community members by decreasing the economic costs of foodborne illnesses.

Participants in MSU Extension Safe Food Preservation workshops reported:

- » 97 percent said they will properly use processing techniques to safely can foods.
- » 93 percent said they will select high-quality foods for preservation.
- » 89 percent said they gained knowledge on how to properly can food.

Getting Local Foods into School Cafeterias

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

A team of MSU Extension's Community Food Systems educators were awarded a Specialty Crop Block Grant through the Michigan Department of Agriculture and Rural Development. This \$66,498 award will fund the development of a curriculum and hands on training for food service staff to better use whole vegetables and fruits in their school food programs. This training will include seasonal menu planning, culinary skills, and produce preparation.

In Oakland County, MSU Extension offered presentations and provided one-on-one counseling to institutional purchasers and growers to assist with increasing sales and purchases of local fruits and vegetables. The Healthy Oakland

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



MSU Extension Farmer's Market Programs help to promote locally grown produce within Oakland County.

Ensuring Safe and Secure Food, continued

Parts of Oakland County are considered food deserts, an urban or rural area lacking convenient access to fresh, healthy and affordable food.

Partnership, of which MSU Extension is a member, created farm to school marketing materials and a survey for local producers about their interest and ability to sell to schools. This survey will be administered in 2016, and a contact guide will be created for school food service directors with the results.



For several years, MSU Extension has worked to get healthful, Michigan-grown vegetables into more school lunches.



NUTRITION, PHYSICAL ACTIVITY & SOCIAL/EMOTIONAL HEALTH

When you support MSU Extension, you help participants learn safe food handling practices, increase their physical activity and improve the quality of their diets. Extension programming also helps decrease incidents of violence and bullying. Encouraging these healthy behaviors helps reduce food and health care costs by helping prevent chronic health conditions and providing safe environments throughout a person's life span.

Fighting Obesity Through Education

Michigan has the 11th highest adult obesity rate in the United States, according to the CDC. More than 30 percent of adults are obese, and an additional 35 percent are considered overweight. Nearly 80 percent of both adults and youth do not consume adequate amounts of fruits and vegetables.

MSU Extension delivers affordable, relevant, evidence-based education to serve the needs of adults, youth and families in urban, suburban and rural communities. Topic areas include nutrition, physical activity, food safety and food resource management. Programs focus on helping participants gain the skills needed to buy and prepare nutritious, budget-friendly foods; increase their physical activity; breastfeed their babies and stretch their food dollars.

In Oakland County, the Nutrition and Physical Activity team taught 124 youth series during 2015; which reached 3,039 students. Each series lasts 45-60 minutes and meet once a week for six weeks. Curricula used for high school aged students are *Cooking Matters for Teens and Steps*. The evidenced/researched based curriculum that is used with pre-K through 8th grade students is *Show Me Nutrition*. Each lesson of this curriculum is age appropriate and is taught at each student's current 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, world hunger, physical activity and general nutrition. Educational settings included but are not limited to public schools in Ferndale, Oak Park, Pontiac and Southfield schools as well as summer feeding sites and summer day camps held throughout the county. New partners for 2015 include Life Skills of Pontiac, Community House of Birmingham and Bradford Academy.

During the year of 2015 there were 40 adult series that took place and MSU Extension reached 395 adults. Adults have three different series that they can choose from that are based on age and/or focus they are as follows:

- » **Eat Healthy Be Active** is a research/evidence based curriculum for adults that was developed by the USDA. The lessons are interactive and can be tailored to specific audience needs (e.g., Limited cognitive ability, increased fiber, etc.) Topics covered include food safety, label reading, stretching food dollars, physical activity, and general nutrition. Topics include food demos and taste testing. Participants are also given nutritional educational reinforcement incentives to encourage practicing what they have learned in class.

Encouraging healthy behaviors helps reduce food and health care costs by helping prevent chronic health conditions and providing safe environments throughout a person's life span.



MSU Extension reached more than 87,000 adults and young people across the state through programming. Nearly one-third of youth increased their level of physical activity and more than two-thirds of adults increased time spent being physically active, including three-quarters of older adults.

Nutrition, Physical Activity & Social/Emotional Health

Programs focus on helping participants gain the skills needed to buy and prepare nutritious, budget-friendly foods; increase their physical activity; breastfeed their babies and stretch their food dollars.

- » **Eat Smart Live Strong** is a research/evidence based-curriculum that is geared towards adults that are 60 years of age and older. This dynamic series focuses on eating fruits, vegetables and getting 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 for all that participate in the program series. New partnerships for this year include West Manor, McDonald Senior Apartments (Volunteers of America Property), Auburn Hills Senior Community Center, Foster Grandparents group and Sheffield Estates.
- » **Cooking Matters** is a 2 hour nutrition series that meets weekly, has a nutrition instructor and chef that help participants make healthy food choices, and encourages participants to incorporate physical activity in their daily lives. Groceries are given at four classes so that the recipes can be duplicated by participants at home. New partnerships formed this year include Arab American Chaldean Council, Henry Ford Hospital West Bloomfield, Community Network Services, Community Housing Networks, Easter Seals of Royal Oak and Kadima Center.
- » **Project Fresh-** Is a special collaboration between Women, Infants and Children's (WIC) and Michigan State University Extension Nutrition in which WIC provides coupons to eligible participants to purchase fresh fruits and vegetables from local farmers' market. MSUE provides nutrition education on how to spend the coupons, ideas on ways to add more fruits and vegetables to their meals and the importance of washing fresh produce. Approximately 500 coupons each worth \$20 were given out to nutritionally at-risk WIC participants in Oakland County.

Healthy Oakland Partnership and Cottage Food Industry

In cooperation with the Healthy Oakland Partnership and the Oakland County Health Division, workshops were presented to potential entrepreneurs looking to start new businesses with the Cottage Food Law of Michigan. The Cottage Food Law workshop provides small scale food producers to see if operating a food business may be successful for the individual. It allows a person to produce and sell a potentially nonhazardous food which doesn't require time or temperature controls to maintain a safe product to the public without licensing and inspection. These foods are produced in home kitchens and are sold directly to customers at farmers markets, farm stands, but not retail stores or restaurants. The Cottage Food law increases the opportunity for economic development locally and provides consumers with the opportunity to try new and local products. Although licensing and inspections are not required to produce a cottage food product, there are regulations that must be adhered to for safety and these workshops presented those regulations to over 40 individuals in Oakland County in 2015. Consumers have become much more aware of where their food comes from. People are looking to purchase locally and preserve their own food. This brings up a whole new set of food safety concerns. Preserving food safely can reduce food costs and provide healthy foods throughout the year for families. It can help reduce

Through the National Diabetes Prevention Program, MSU Extension helps participants learn ways to change their lifestyles and improve their health.



Nutrition, Physical Activity & Social/Emotional Health

the consumption of added sugars and salt which are implicated in health issues. Both were specifically addressed with the new 2015 Recommended Dietary Allowances. Nineteen workshops on food preservation, covering canning, pickling, making jams and jellies, freezing and drying foods were presented in Oakland County with 129 youth and 257 adults participating.

Senior Market FRESH

Senior Market FRESH (Farm Resources Encouraging and Supporting Health) provides eligible adults over the age of 60 years with coupons to purchase unprocessed, Michigan grown produce. Seniors whose income is 185% or less of the poverty level participate in educational activities and then receive coupons totalling \$20 to be used at farmers markets which participate in Senior Market FRESH to purchase healthy produce. Senior Market FRESH not only increased access to fresh produce for seniors, but also enhanced the earnings of participating farmers and markets by increasing purchases of locally grown produce at local farmers markets and farm stands. This program is a win-win situation that provides economic benefits with the opportunity for seniors to improve the quality of their diet.

Friendship Circle and Special Needs Populations

The Friendship Circle is a nonprofit organization which provides lifelong services to special needs individuals and their families. Through a partnership with the Friendship Circle, two different series of classes were taught with cognitively impaired and emotionally impaired young adults and youth. The classes for young adults centered around planning and preparing complete, healthy meals from beginning to end. Part of the instruction included food safety and kitchen safety. This class taught essential life skills to gain independence and confidence in the kitchen. Kids in the Kitchen was a pilot class for youth from age 6-12. It dealt with manners around the table, basic food safety concepts, trying new healthy foods and simple food preparation. The emphasis was on healthy foods and encouraging new foods. Small accomplishments with these programs were extremely rewarding for the participants, their families and the instructors. Seeing these individuals successful and learning skills that help make them feel valued and independent, validated the benefits of these programs. At the end of the sessions, certificates of completion were awarded to the participants and they shared their experiences with their families in a special ceremony.

Over 50 nutrition presentations were made to groups ranging from healthy holiday nutrition strategies to men making meals. Approximately 2,700 Oakland County residents participated in educational programs that stressed healthy food preparation and consumption, the importance of physical activity for life long health. These programs were presented in over 30 municipalities of Oakland County and were open to all residents.

MSU Extension's Supplemental Nutrition Assistance Program Education (SNAP-Ed) programs teach adults how to make the most of their food dollars, by developing skills such as menu planning, understanding recipes and keeping food safe.



Participants learned about the nutrition and health benefits of foods to feed their families in healthy ways.

MAKING THE MOST OF OUR NATURAL ASSETS

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

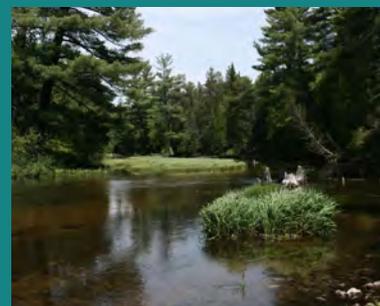
When you support MSU Extension's natural resources education programs, participants learn about income-generating opportunities, ecological principles, natural resource issues and the role of natural resource professionals. They also explore public policy issues related to environmental stewardship.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

Natural Shoreline Program

According to the Environmental Protection Agency's National Lake Assessment, the biggest problem in the nation's lakes is poor lakeshore habitat. With more than 11,000 inland lakes in Michigan, there are many threats to shoreline and shallow water areas. Over time, increased shoreline development has resulted in the removal of native vegetation at the shoreline, resulting in unstable shorelines and loss of habitat, both of which negatively impact lake ecosystems.

In an effort to help residents understand lakes and their shorelines, the Michigan Natural Shoreline Partnership (MNSP) was formed in 2008 as a public/private partnership consisting of governmental agencies, green industry representatives, academic institutions, and environmental and nonprofit organizations that promote natural shoreline management. MNSP's mission is to promote the use of natural shorelines through the use of green technologies and bioengineered erosion control for protection of Michigan's inland lakes. Oakland County is home to over 1,400 lakes and 4 major watersheds. The most recent estimated value of roughly 29,000 waterfront parcels was \$10.6 billion. Maintaining this combination of economic, aesthetic and ecological value and lake access hinges upon healthy lake ecosystems. Since 2012, Michigan State University Extension has coordinated workshops taught by MNSP-trained "Shoreline Educators." Practices presented focus on those that create stable shorelines protected from waves and erosion, serve as natural features to prevent runoff, and provide suitable habitat value while maintaining aesthetic value of and access to lakes.

In order to marshal all of the passion and energy so many people and organizations have regarding Michigan's lakes, MSU Extension helped organize the first Michigan Inland Lakes Convention.



Making the Most of Our Natural Assets, continued

In 2015, MSUE partnered with the Michigan Natural Shoreline Partnership, Michigan Department of Environmental Quality, North Oakland Wild Ones, Clinton River Watershed Council, Oakland County Parks and Recreation, Oakland County Water Resources Commissioner's Office, and the Oakland Conservation District. MSU Extension and partners have offered natural shoreline workshops in Oakland County since 2012.

Michigan Conservation Stewards Program

Michigan State University Extension (MSUE) has offered the Michigan Conservation Stewards Program (CSP) since 2006. CSP provides learning and stewardship opportunities for citizens to:

- » Gain knowledge in natural resources ecology and conservation management
- » Gain knowledge of and experience with ecosystem-based management
- » Explore one's own attitudes and diverse attitudes of others towards natural resource management and the affiliated state and local agencies, organizations and institutions
- » Gain skills necessary to complete conservation management activities
- » Contribute to existing natural resources stewardship activities

In 2015, Oakland County Conservation Stewards reported 1,263 volunteer hours. Volunteers also completed 328 advanced training hours to help expand their expertise as conservation volunteers in their communities.

Wastewater Management Programs

With 1.4 million households in Michigan on septic systems and estimates of 10-25% of those experiencing some level of failure, education on use and maintenance is critical to preserve the quality of our lakes, rivers and streams. With the expansion of homeowner programs to include commercial trainings and community outreach, we wanted to promote these efforts to the audiences that could benefit from and help promote future programs in order to better manage use of household wastewater.

MSU Extension presented a statewide live webinar based on the septic system use and maintenance homeowner programs MSUE has been offering in southeastern Michigan.

Water trails supply residents and visitors adventures along urban waterfronts or remote Great Lakes coastline as well as provide communities with economic development opportunities.



Michigan Sea Grant Extension offers expertise to coastal communities and partners interested in developing and enhancing water trails.

Making the Most of Our Natural Assets, continued

The program was held in partnership with the Macomb County Health Department and local communities and was expanded to include the Michigan Department of Environmental Quality. The webinar provided an overview of onsite wastewater in Michigan and the basics on what a septic system is, how it differs from a sewer system, how to maintain the system, best management practices to protect the system and how to troubleshoot problems. Two hundred and forty people registered for the webinar with 148 sites from 45 counties and 1 other state participating. 24 sites participated from Oakland County with several sites having multiple participants.

Research conducted annually by teens involved with M4-HYCC has introduced a bill that promoted the development of the Michigan Heritage Water Trails program.

The Michigan 4-H Youth Conservation Council taps into the desire of Michigan's youth to get involved and become a community leader on subjects they are passionate about.



SUPPORTING CONSUMER HORTICULTURE

Oakland County Master Gardeners

The Master Gardener Volunteer Program (MGVP) is one of MSUE's most successful and visible volunteer training programs. A common misconception is that this is simply a horticultural training program. In fact, it is a leadership development program, using horticulture as the venue. The pre-requisite for the Master Gardener program is that the student love gardening and have a belief in community service. Once the 40 hours of training has been successfully completed, Master Gardener Trainees have one year to complete 40 hours of volunteer service for local non-profit organizations.

Extension Master Gardeners provide outreach for our office in consumer horticulture, extending the reach of MSU Extension Oakland County horticulture staff. Master Gardeners staff our garden hotline and diagnostic clinic as well as work with youth in schools and other settings. They also volunteer on projects for local municipalities, land conservancies, Oakland County Parks and other local parks. Master Gardeners also volunteer at farmers markets information tables, Plant a Row for the Hungry gardens, as well as the gardens at Meadowbrook, Cranbrook, Tollgate Education Center, and the Detroit Zoo. EMG's are involved in so many projects, they are too numerous to mention!

Consumer Horticulture

In addition to the Master Gardener Training, other programs presented in 2015 include topics ranging from how to interpret a soil test, to a travelogue series featuring Michigan public gardens and how to translate design elements from each garden in to a backyard setting. This year we also presented two different seminars on garden tools (cleaning and sharpening, and what to look for when buying quality garden tools). A total of 526 people attended these programs.

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



Master Gardeners have assisted thousands of Oakland County residents in learning how to grow their own fresh produce, leading to healthier eating habits.

Supporting Consumer Horticulture, continued

Smart Gardening Initiative

The MSUE Consumer Horticulture team has a Smart Gardening Initiative. This initiative focuses on eco-friendly gardening techniques divided into three categories: plants, soils, and lawns. Twenty-six tip sheets have been developed focusing on science-based information from MSU and other land grant universities. These resources can be found on our Gardening in Michigan website; <http://migarden.msu.edu/>. EMG's who are interested in becoming trained to deliver the Smart Gardening message must read and understand the message of all the tip sheets and view various webinars. Once they complete the training, they are encouraged to volunteer at different events where the Smart Gardening message is to be the main focus. In 2015, over the 4-day Cottage and Lake Living Show and the 4-day Michigan State Fair ,taking place at the Suburban Collection Showplace, the volunteers and staff made contact with over 921 people.

Addressing Pest Issues

The spotted wing drosophila has an optimal developing temperature of 65 to 70 degrees Fahrenheit, normal conditions during a Michigan growing season. This makes early detection information vital to activate pest management programs that prevent rapid population increases and potential infestations.

MSU Extension partners with farmers and statewide agencies to monitor these pests. Working together to eliminate these invasive species will be essential to lessen the loss of the Michigan tree fruit crops in the future.

Growers need to monitor for both the spotted wing drosophila and the brown marmorated stink bug because:

- » Spotted wing drosophila feed upon and lay eggs in ripe fruit.
- » Spotted wing drosophila can produce many generations in a relatively short amount of time.
- » The brown marmorated stink bug has a host range of more than 300 known plants, including fruits grown in Michigan.
- » In other states, brown marmorated stink bug populations reached high numbers causing substantial damage in tree fruits.

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

The brown marmorated stink bug has a host range of more than 300 known plants, including fruits grown in Michigan.



Supporting Consumer Horticulture, continued

Showing Lawmakers the Value of Composting

Composting animal mortalities is a regular part of work for today's farm operators. However, municipalities rarely use this method despite its being a good solution to disposing of animal carcasses.

Proper animal composting works well as a way to deal with road kill, as an alternative disposal method for animal control units and as a disaster response when livestock and other animal mortalities require disposal. Composting is a dynamic process, enclosing an animal carcass in a mixture of plant or fiber-rich materials such as wood chips or used compost. Microorganisms in the mixture use moisture, carbon and oxygen to break down the carcass tissues while releasing heat that kills harmful bacteria.

- » During the 2014 Ag Expo, MSU researchers provided a demonstration for local municipality representatives of animal mortality composting, recommending it as a safe, biosecure and economical method of road-kill disposal.
- » Composting is an effective and safe way to deal with all animal mortalities, regardless of species.
- » Composting works well on farms and can be used by municipalities for road kill or for animal control centers.
- » Composting is a viable solution for disaster relief response teams in situations involving a high number of animal mortalities.

Proper animal composting works well as a way to deal with road kill, as an alternative disposal method for animal control units and as a disaster response when livestock and other animal mortalities require disposal.



MSU researchers provided a demonstration for local municipality representatives of animal mortality composting.

Extension Educators Serving Oakland County

Name	Role	Phone
Agriculture & Agri-business		
Kristin Getter	Educator, Floriculture	517-355-5191
Frank Gublo	Product Center Counselor	313-401-6268
Tom Guthrie	Educator, Swine & Equine	517-788-4292
Hal Hudson	Educator, Vegetables	989-672-3870
Phil Kaatz	Educator, Field Crops	810-667-0341
Micah Loucks	Product Center Counselor	313-567-9701 x103
Jill O'Donnell	Educator, Christmas Trees	231-779-9480
Bob Tritten	Educator, Tree & Small Fruit	810-732-2177
Community Development: Community Food Systems, Financial Stability, Public Policy & Land Use		
Terry Gibb	Educator, Public Policy, Land Use	586-469-6053
Alan Jaros	Educator, Tollgate Farms	248-347-0269
Elizabeth Martinez	Educator, Personal Finance	248-858-1008
Crystal Wilson	Educator, Comm. & Economic Dev.	313-309-1674
Horticulture & Natural Resources		
Bindu Bhakta	Educator, Water Quality	248-858-5198
Carol Lenchek	Educator, Natural Science	248-858-0900
Mary Wilson	Educator, Consumer Horticulture	248-347-0269 x219
Nutrition, Health & Wellness		
Robin Danto	Educator, Nutrition & Food Safety	248-858-0904
Maria Del Real	Program Instructor, Breastfeeding	248-858-0912
Saneya Moore	Educator, Nutrition	248-858-9726
Sandria Graham	Program Instructor, SNAP-Ed	248-381-3101
Nancy Hampton	Program Instructor, SNAP-Ed	248-858-0275
Holly Platcha	Program Instructor, EFNEP	248-858-0499
Debra Studebaker	Program Instructor, EFNEP	248-975-9610
Maha Alnunu	Program Instructor, Nutrition	248-858-1993
Iteria Finley	Program Instructor, Nutrition	248-858-5199
Lisa Tams	Educator, Family Wellbeing	734-727-7236

Extension Educators Serving Oakland County, Continued

Name	Role	Phone
Youth Development		
Ellen Koehler	Program Coordinator, Tollgate Farms	248-347-0269 X227
Lisa Kelley	Program Coordinator, Tech Wizards	248-858-1524
Mary Blumka	Program Coordinator	248-858-0890
Scott Lakin	Educator, Tech Wizards	248-858-1524
Debra Morgan	Program Coordinator	248-858-0894
Jason Scott	Program Coordinator	248-858-0892
Gary Williams	Educator, NR-Outdoor Education	313-494-4884
Administrative Staff:		
Richard Wooten	District Coordinator	248-380-9100
Edward Scott	Associate District Coordinator	248-858-0905
Sheila Leddy	Supervisor of Administrative Services	248-858-0885



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