MESSAGE FROM THE DISTRICT COORDINATOR

MSU Extension (MSUE) staff strive to provide programming that has a positive impact on the citizens of Monroe County while making the best use of the local, state, and federal funds that have been generously provided for the completion of this work.

Extension educators and program staff continue to look for ways to streamline program delivery systems to make our programs accessible for all county residents.

Advancements in technology have enabled MSUE to provide access to programs and resources in a more timely and efficient manner. Still, our presence in county offices across the state allows us to remain connected to the communities we serve, which gives us a better understanding of local programmatic needs.

This report is intended to provide an overview of the wide array of programming opportunities that have been provided to the residents of Monroe County over the last year. Thank you for your continued support.

Matt Shane
District Coordinator, District 12

CONTACT US

963 S. Raisinville Rd.,
Monroe, MI 48161
(734) 240-3170
http://msue.anr.msu.edu/county/info/
Monroe

Matt Shane, District 12 Coordinator
shanemat@anr.msu.edu, 517-264-5308

Terry Clark-Jones, Extension Educator
clarkjon@anr.msu.edu, 734-240-3170

Darryl Diamond, 4-H Program Coordinator
diamon44@anr.msu.edu, 734-240-3188

Sara Lewis, 4-H Program Coordinator
seitzsal@anr.msu.edu, 734-240-3174

Heather Hampel, SNAP-Ed Instructor
hampel@anr.msu.edu, 734-240-3171

Denise Kohler, SNAP-Ed Assistant
kohlerd@anr.msu.edu, 734-240-3176

William ‘Allen’ Russell, SNAP-Ed Assistant
russe414@msu.edu, 734-240-3175

Winnie Webb, Breastfeeding Peer
webbw@anr.msu.edu, 734-240-3178

Diane Michaud, Secretary
diane_michaud@monroemi.org, 734-240-3182

Patti Wartinger, Secretary,
patti_wartinger@monroemi.org, 734-240-3184

MI SPARTAN IMPACT—DISTRICT 12

Impact of MSU on Hillsdale, Lenawee, Monroe, Jackson, Washtenaw and Lenawee Counties

Current Number of 4-H Members ........................................16,212
Current Number of Students Enrolled at MSU ...................3,889
Current Number of Veterinary Students ......................47
Current number of Medical Students .......................127
Current number of MSU Alumni in the District ..........21,559
MSU Spending with Local Businesses ....................$15,129,653

15% Growth in Adults Participating in MSU Extension Programs

16% Growth in Youth Participating in MSU Extension Programs

MSU Extension’s Expanded Digital Reach

Based on data from July 1, 2013 to June 30, 2014.
DEVELOPING YOUTH AND COMMUNITIES

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). Extension programs help children develop early literacy skills that support school readiness. They learn leadership and decision-making skills in 4-H that increase their likelihood of becoming civically active. 4-H'ers also demonstrate reduced high-risk behaviors such as drug use, and learn to complete tasks, solve problems and seek any help they might need from peers and adults. 4-H involvement also helps participants avoid or reduce involvement with the court system. This helps ensure more young people succeed in school, attend college and contribute to their communities. More successful young people in communities results in greater tax revenues and consumer spending and increases the likelihood that young people will stay in, or return to, their communities.

Supporting school and student success

To ensure the future success of the Great Lakes State, Michigan schools are charged with improving educational outcomes for the state’s youngest minds. Yet, they must do this with fewer resources than ever. Partnering with schools to provide innovative and economical enhancements to in-school learning, MSU Extension youth educators are working with schools to provide custom solutions to their challenges.

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

Because of these unique partnerships, Michigan youth benefit:

» In 2015, 975 Monroe County students from 27 classrooms participated in Ag Awareness Day. This program teaches 2nd and 3rd graders across the county about agriculture and about where their food comes from and how it is produced. It also gives 4-H and FFA youth the opportunity to speak to a large group of students about the subject of agriculture. There were 35 learning and activity stations. The stations were run by 4-H and FFA youth, commodity groups, adult volunteers, and local businesses. In total, 45 adult and 130 youth volunteers contributed to this program.

From once-a-month family workshops and in-school science lessons to after-school technology training and classroom gardening, MSU Extension supplies Michigan schools and the families they serve with the support they need to be successful.
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 U.S. 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, out-of-school settings. Program results include:

» 100 percent of 4-H Animal & Veterinary Science Camp participants want to learn more and 97 percent plan on applying the skills learned in camp to real-world settings.

» “We always learn something different every visit. It’s good to have a variety of vet students to teach us their knowledge and experiences.” - Monroe County Volunteer

» The Great Lakes Education Program has reached more than 7,600 participants teaching economic growth and protection of coastal resources.

Preparing children for academic success

Youth who are not proficient readers by fourth grade are 68 percent more likely to drop out of high school. Research shows that young children who develop literacy skills prior to entering kindergarten are better prepared to learn to read. In Michigan, there is an educational standard to ensure children from birth to 8 years old have access to learning and development programs.

Children’s school readiness improves when parents and caregivers are taught methods that increase early childhood science and reading literacy, and ways to prepare children socially and emotionally. Programming provided through MSU Extension and other organizations prepare children for academic success by giving parents and caregivers the tools they need to help their children succeed in school. MSU Extension is also making learning to read more accessible by putting books into the hands of thousands of children in families living in low-income situations.

» In 2015, 500 books have been received to distribute to Monroe County families.

» To date, 250,000 books have been distributed to more than 2,500 children through programs sponsored by MSU Extension and its partnership with the Molina Foundation.

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

» As a result of MSU Extension trainings and workshops, adults indicated an increase in knowledge of concepts of early childhood development and techniques that promote school readiness and academic success.

Making an impact at legislative level through 4-H

More than 80 teens from across the state, including six from Monroe County, experienced and explored various aspects of policy, civic engagement and leadership at the annual 4-H Capitol Experience.

High school students gathered in Lansing on Sunday to begin learning from and interacting with state senators and representatives, chaperones and other youth participants.

“Youth came to Lansing to interact with their legislators and learn how the legislative system works,” said Wayne Schmidt, senator for the 37th district. “When 4-H'ers return to their communities and are thinking about their futures, they will have a more well-rounded view of the world and better understanding that there is so much out there that the world has to offer each of them.”

Over the four-day event, youth participated in a nine-hour Michigan legislative simulation, which required teens to research and propose Senate and House bills, conduct House and Senate leadership position elections, participate in legislative committee meetings, debate and vote on bills, and see their bills signed into law by an acting governor.

In addition to the structured simulation, participants observed actual House and Senate sessions, and visited community and state agencies, lobbyists and legislative aides.

Involvement in Michigan 4-H and Capitol Experience helps foster skills of leadership and involvement in youth; these experiences can be very beneficial in the development of this age group, said Darren Bagley, Michigan State University Extension educator.

“Youth learn how to make the world a better place,” said Bagley. “Youth have a unique perspective on the world, they see the world in a way no other group can—they’re free from the cynicism of many adults, and they can use that positivity to make a difference in the world.”

Objectives of this event include helping youth increase communication, teamwork, citizenship, leadership and skills to help them transition to college and life as an adult; allowing teens to expand career and personal interests while discovering how to be actively involved in influencing policy decisions; and providing youth tools to explore policy issues that may affect individuals and communities.

To date, 250,000 books have been distributed to more than 2,500 children through programs sponsored by MSU Extension and its partnership with the Molina Foundation.
Youth influencing community decisions with support from adults

More than 20 percent of the U.S. population is between the ages of 5 and 19. These youth look to adults for guidance in various situations. As youth become more involved, whether in academic or community settings, they search for ways in which their voices can be heard. Youth voice is a resource that often goes untapped in communities. MSU Extension provides training through Michigan 4-H for internal and external groups to consider the value of youth-adult partnerships in the decision-making process.

Youth are gaining life skills such as leadership, planning and teamwork, while adults are learning about the information about the needs, concerns and issues that pertain to youth. Local 4-H councils and committees are encouraged to seek out, listen to and enact youth ideas in their program planning. As a result of youth-adult partnerships:

» Communities learn about resources and creativity youth have to solve critical problems.

» Trainings offered in 9 Michigan counties promote the importance of youth inclusion. As a result 4-H councils, boards and committees in Monroe County expanded options for youth leadership roles.

» 44 Monroe County youth participated in officer training offered by the Youth Leadership Board. Leadership and Civic Engagement Educator, Janelle Stewart, presented an interactive activity called “Parli-Pro Trail Mix” to teach basic parliamentary procedure rules to 4-H youth.

» One Monroe County 4-H youth is a member of the State 4-H Youth Leadership Council.

Monroe County 4-H

» 1665 youth enrolled in 4-H clubs

» 595 adult and 65 youth registered volunteers

» Total participants by activity (duplicates included)
  Science Engineering & Technology  4,817
  Citizenship  9,422
  Healthy Lifestyles  1,324
  Total  15,563

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.
ENSURING SAFE AND SECURE FOOD

When you support MSU Extension’s efforts to enhance residents’ access to an adequate supply of safe, affordable food, program participants will focus on food safety measures in the field and at harvest, learn proper food preparation and food preservation techniques, and bring community partners together to strengthen access to healthy food supplies. This leads to a healthy population, which in turn helps keep health care costs in check and our communities viable.

Teaching residents about food safety

From the farm to the kitchen table, food safety is an important issue. Foodborne illness outbreaks occur crossing all socioeconomic lines from production and consumption to preservation of foods. Foodborne illness costs the U.S. economy billions of dollars each year in lost productivity, hospitalization, long-term disability and even death. The Cottage Food Law took effect in July 2010, allowing home-processed foods to be sold to the public, emphasizing the need for food safety education.

MSU Extension Cottage Food Law workshops supply Michigan residents with up-to-date, scientifically backed information on food safety. In 2013, nearly 4,000 Michigan residents learned about preserving food and preparing safe food for public consumption. Food consumers can have increased confidence when buying food products sold by someone with an MSU Extension food safety certificate related to producing cottage foods.

» 15 Monroe County residents participated in MSU Extension Cottage Food Law programs.

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 food safety workshops, they are careful to wash their hands and to keep countertops clean when preparing foods.

In 2013, 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. A survey conducted by the National Center for Home Food Preservation in 2005 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 2013, 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, estimated at $6.9 million in 2000.

» 21 Monroe County residents participated in MSU Extension food safety programs. 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.

Michigan produced more than 83 million bushels of soybeans, valued at more than $1 billion, in 2013, making it one of Michigan’s most valuable commodities.
ENSURING STRONG COMMUNITIES

When you support MSU Extension, program participants learn how to implement best practices in good governance that keeps communities solvent, productive and engaged; learn effective conflict management skills that help leaders and residents work collaboratively on complex issues; and engage youth leaders in decision-making. In the personal finance area, MSU Extension helps youth and adults alike learn the skills they need to increase their savings, manage their spending avoid predatory lending and reduce mortgage defaults. All of these outcomes help lower the cost of governmental services and lead to personal and community stability, strong neighborhoods and safe communities.

Helping Michigan make smart health insurance decisions

In 2013, many Michigan individuals, businesses and families were facing important health insurance decisions that they had never had to consider before. The passage of the Affordable Care Act not only opened up the health insurance market to hundreds of thousands of additional people and many small businesses, but also changed the insurance landscape for the previously insured.

With confusion about new health insurance laws, requirements and the launch of the Health Insurance Marketplace in Michigan, MSU Extension conducted targeted outreach to both uninsured and underinsured residents as well as small businesses and farm owners to increase knowledge, understanding and confidence in the ability to purchase health insurance.

MSU Extension educated uninsured and underinsured individuals and families through weekly webinars and through social media and other online outreach, as well as giving on-site presentations throughout the state for small businesses and farm owners.

From November 2013 to April 2014, MSU Extension:

» Presented 59 direct education sessions reaching 987 consumers, including 115 from Monroe County.

» Made 328 one-on-one contacts via email and phone to answer questions.

» Provided 14,467 indirect educational outreach activities via social media, website page views, educational news articles, email newsletters and other media.

» Made 854 referrals to local health insurance enrollment counselors.

MSU Extension conducted targeted outreach to residents, small businesses and farm owners to increase knowledge, understanding and confidence in the ability to purchase health insurance.

MSU Extension helps youth and adults alike learn the skills they need to increase their savings, manage their spending avoid predatory lending and reduce mortgage defaults.
Ensuring Strong Communities, continued

**Strengthening Michigan’s financial capacity**

When individuals and families in Michigan are financially healthy, it creates an environment for sustained community prosperity. MSU Extension’s financial literacy and housing education programs help families and individuals at any stage of their lives make smart money decisions and work through the homeownership process. These courses help reduce mortgage defaults through counseling new homebuyers as well as homeowners going through the foreclosure process.

Widespread efforts by MSU Extension have led to a significant increase in knowledge gained and behavioral changes across Michigan. Since July 2013, MSU Extension’s foreclosure counseling has aided participants spanning 24 counties, across all income levels. As a result of receiving this counseling, a higher percentage of homeowners are able to better communicate with their mortgage servicers, obtain loan modifications and in over half of the cases, keep their homes.

» 148 Monroe County residents participated in Financial Literacy and Homeownership programs.

As a result of all financial and homeownership education:

» 84 percent pay their mortgage on time.
» 80 percent now save money for home maintenance costs.
» 86 percent maintained or increased their knowledge of predatory lending practices.
» 54 percent of foreclosure clients were able to keep their homes.
KEEPING BUSINESSES STRONG

MSU Extension and the MSU Product Center help Michigan entrepreneurs develop and commercialize high-value, consumer-responsive products and businesses in the food, agriculture, natural resources and bioeconomy sectors. When you support MSU Extension, you help participants understand the economic, environmental and social benefits of purchasing local and regional foods. You also help young people develop business skills that will help them succeed as adults and help communities capitalize on their ecological, social and cultural assets. This fuels the economy by creating and retaining jobs, and helps ensure a healthy tax base.

Providing valuable work experience to young professionals

MSU Extension encourages Michigan’s young people to envision a future career path that can help them positively impact their communities and build valuable professional skills. A new internship program creates a link between campus life and future career success. Started in 2013 with seven interns, the program has been expanded in 2014 to 13 interns because of its initial success.

The internship program has been popular with communities, MSU Extension educators and, most importantly, with the students, who have shown growing interest. In 2013, the program was piloted in regions in Michigan with a focus on agriculture. It provided students with a valuable networking opportunity with farms and within the agriculture industry, and allowed them to gain important skills in vital areas of agriculture.

In the internship program’s first year, interns worked on:

» Improvement of air quality around swine production facilities through an investigation of various plant species for use as vegetative environmental buffers.
» Basic equine health and body condition as well as safe handling of horses.
» Pork quality assurance and site assessment.
» Forage management for sheep and goat production.

A new MSU Extension internship program provided students with a valuable networking opportunity with farms and within the agriculture industry, and allowed them to gain important skills in vital areas of agriculture.
KEEPING PEOPLE HEALTHY

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.

Working to improve social and emotional health

Many negative factors affect social and emotional health, including ongoing and toxic stress that may result from situations including abusive relationships, bias, damaging coping behaviors and relationship violence. Across the lifespan, people faced with these situations and settings are at risk for a wide range of physical, psychological, social, emotional, cognitive, financial and spiritual health challenges. The United States spends an estimated $425 billion in direct and indirect costs of violence each year.

RELAX: Alternatives to Anger is designed to actively engage adult learners to increase knowledge and skills around anger management and give them constructive ways to deal with anger. In 2013, MSU Extension collected 712 RELAX evaluations from participants. RELAX workshops are offered every two to three months in Monroe County.

Consistently, more than half of program participants leave RELAX with improved knowledge or new skills designed to promote social and emotional well-being with others in their lives and immediate social environments.

» 59 Monroe County residents participated in social and emotional health programs.
» 54 percent increased effort to talk things through until a solution is reached.
» 55 percent increased effort taking time to understand how others feel.
» 56 percent increased effort working hard to be calm and talk through issues.
» 56 percent increased effort that if they do get upset, they try to end conflicts on a positive note.

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.
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 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.

MSU Extension reached more than 87,000 adults and young people across the state through programming. Through the program outreach:

» More than one-third of youth decreased their intake of sugary drinks.
» Nearly one-third of youth increased their level of physical activity.
» Nearly half of adults increased their daily vegetable and fruit consumption.
» More than two-thirds of adults increased time spent being physically active, including three-quarters of older adults.
» More than two-thirds of adults reported improved ability to make their food dollars go further.

Breastfeeding Initiative (BFI) Mother-to-Mother Program

Many new mothers know the value of breastfeeding, but unfortunately run into barriers during their breastfeeding experience. The BFI empowers and supports mothers to overcome these barriers. The BFI program utilizes peers to provide breastfeeding support to mothers throughout the first year of their infant’s life. The program combines the strengths of MSUE and WIC in an effort to reverse declining breastfeeding rates among low-income women. The program began in 1993 as a free program that offers breastfeeding information, encouragement and support to WIC and SNAP/Bridge Card participants through BFI peers. This year a total of 421 contacts were made with nursing mothers through BFI programming in Monroe County.
Teaching valuable healthy-eating skills

In 2011, 17.5 percent of people in Michigan were considered to be living below the poverty level. More than 1.7 million Michigan residents receive Supplemental Nutrition Assistance Program (SNAP) benefits.

MSU Extension’s Supplemental Nutrition Assistance Program Education (SNAP-Ed) programs including Cooking Matters, Project Fresh, Healthy Harvest and Show Me Nutrition 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.

In addition, MSU Extension will be able to provide 5,000 nutrition program participants in Wayne County with nutrition education items that will help reinforce the education they received, including measuring cups, cutting boards and vegetable scrub brushes.

MSU Extension nutrition education programs have:

» Reached 1,231 youth in Monroe County with SNAP-Ed Nutrition and Physical Activity programming.

» Provided nutrition education during the summer months to 300 adults who participate in the Monroe County WIC Project FRESH Program.

» Reached 80,366 Supplemental Nutrition Assistance Program – Education (SNAP-Ed) participants from 82 of Michigan’s 83 counties in 2013.

» In the next year, targeted program participants will receive more than 72,000 nutrition education reinforcement items, including measuring cups, cutting boards, strainers and more from MSU Extension nutrition educators.

» These items are expected to have a direct and indirect impact on more than 12,000 individuals and families in Michigan.

Show Me Nutrition: Gets young children excited about healthy eating and reading. Each lesson includes reading a book, physical activity and opportunities for tasting a variety of healthy foods.
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.

**Helping Michigan residents become better stewards of our inland lakes**

Michigan’s has more than 11,000 inland lakes, which are among its most beautiful and precious resources. 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, where hundreds of enthusiasts, professionals, government officials and others gathered for an intensive three-day convention.

The convention helped participants learn how to become better stewards and better protect Michigan’s inland lakes, and it boasted more than 25 educational opportunities. Sessions included such topics as youth and volunteer education, aquatic invasive species, plant identification, algae blooms and water quality.

The convention was a partnership between MSU Extension, the Michigan Department of Natural Resources, the Michigan Department of Environmental Quality, the Michigan Lake and Stream Associations, the Michigan Natural Shoreline Partnership, the MSU Institute of Water Research and the Michigan Chapter of the North American Lake Management Society.

- 372 people attended the Michigan Inland Lakes Convention.
- More than 66 percent represented nonprofit agencies or were riparian landowners.
- More than 75 percent reported increased leadership, confidence and stewardship.
- More than 90 percent reported they gained information that will assist them as professionals or volunteers.
Enhancing, expanding fishery ecosystems, coastal aquatic recreational opportunities

Nearly 40 percent of Michigan’s population lives in the southeast region along lakes Huron, St. Clair and Erie. Historically, this region, including the St. Clair and Detroit rivers, supported a diverse and productive fishery, as well as multiple other uses. Years of intense development and use resulted in six areas with severely degraded environmental conditions designated by the Great Lakes Water Quality Agreement as Areas of Concern with specific beneficial uses impaired.

Michigan Sea Grant Extension delivers research, education and outreach that address needs and priorities identified by stakeholders in coastal counties. In the urban, southeast region, Michigan Sea Grant staff engaged partners on projects designed to foster science-based decisions that promote vibrant, livable communities that offer opportunities for economic growth while preserving our natural resources.

These programs:

» Led to the delisting of the beneficial use impairment for tainting of fish and wildlife flavor.

» Helped bring about successful lake sturgeon, walleye, lake whitefish and other native fish spawning occurring on the four habitat reefs constructed.

» Provided leadership to Michigan’s Statewide Public Advisory Council.

Connecting paddlers to a Pure Michigan experience

With more than 3,000 miles of Great Lakes coastline and 36,000 miles of rivers and streams, Michigan is rich in water trail opportunities. While popular canoeing or kayaking areas often have well-developed access and launch points, communities often struggle with attracting paddlers to downtown or commercial areas or other community amenities such as lodging and restaurants. 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. Planning for a water trail focuses on linking paddling recreation opportunities with other community amenities to enable water resource-based economic development strategies within regional and statewide contexts. Sea Grant has worked with state and federal agencies and numerous other
Making the Most of Our Natural Assets, continued

partners throughout the state on the development of contiguous water trails and other trails along Michigan’s Great Lakes coasts, resulting in:

» The establishment of the Michigan Comprehensive Trails Plan in 2013.

» The michiganwatertrails.org website, an online resource linking regional water trails forming a statewide water trail system along nearly every mile of Great Lakes shoreline.

» The Pure Michigan Trail Network, established by the Michigan Legislature.

Lake Erie Watershed Basin

In the Lake Erie watershed basin, agriculture is the dominant land use, with 55% of the landscape or 186,389 acres in some form of agricultural use, primarily corn and soybeans (crop data layer, 2014). Almost all of the land that is currently in agriculture was actually originally farmed back in the mid-1800s.

Not surprisingly, all of this agricultural activity also produces a non-point runoff into the area’s coastal tributaries. One objective of this project is to summarize the viability of the 13 coastal tributaries in our project area. Controlling non-point runoff is projected to only get more difficult with projected increases in severe wet weather storm events. Much attention is currently being placed on the Western Lake Erie Basin to minimize the amount of soluble reactive phosphorus entering the nearshore from the coastal tributaries, and leading to large outbreaks of harmful algal blooms and dead zones in Lake Erie. Farmers don’t want to lose valuable soil and fertilizer, and no one wants their water to be contaminated.

The primary objective of this project is to figure out what factors are contributing to agricultural non-point runoff in our project area, and identify the most effective and efficient strategies to significantly reduce the impact of non-point runoff on the health of our coastal tributaries, coastal wetlands, inland wetlands, migratory fish, and vulnerable wildlife.

A team of MSU Extension educators has been working with several other agencies to develop solutions to the growing runoff issue in Lake Erie.

Partner agencies include:

» Michigan Department of Agriculture & Rural Development

» Michigan Department of Environmental Quality

» Michigan Department of Natural Resources

» Michigan Department of Transportation

» United States Department of Agriculture

Currently, culverts (road/stream crossings), agricultural non-point runoff, drainage systems and urban non-point runoff are the biggest challenges facing the health of coastal tributaries in the Lake Erie Basin.
Michigan agriculture continues to be a growing segment of the state’s economy. The production of commercial food and nonfood agricultural operations is growing rapidly. The number of households raising a portion of their own food and raising livestock or gardening for pleasure or relaxation continues to increase. When you support MSU Extension, you help participants learn profitable and efficient business and production practices. Participants also learn how to optimize and reduce the use of pesticides and fertilizers, and how to conserve and protect water resources. This education leads to better use of time, money and human capital, and helps retain and create agricultural jobs. These measures strengthen Michigan’s economy while connecting farmers to local food opportunities and global markets. In this way you help MSU Extension encourage growth in a sustainable and prosperous Michigan food and agriculture system.

**Bridging the gap between farm to fork**

Breakfast on the Farm (BOTF) bridges the gap between Michigan’s farmers and consumers who often have little idea where the food on their plates comes from. BOTF invites the public to enjoy a delicious farm-fresh breakfast on a working farm and educates them on the farm-to-fork process. BOTF is an open door for the community to learn about modern food production and build trust with and appreciation for local farmers. An online survey showed that 88 percent of participants told others they should attend a BOTF event.

In 2014, three BOTF events took place. There have been 26 events held since the program’s launch in 2009. A total of 12,687 adults and children attended five BOTF events held in 2013.

A 2013 survey asked BOTF participants about their experience. The results showed:

- 53,552 children and adults have attended Breakfast on the Farm events since the program’s launch in 2009.
- 80 percent left with a positive impression about modern dairy farms.
- 61 percent said farmers are doing a good job caring for their animals.

**Breakfast on the Farm (BOTF) bridges the gap between Michigan’s farmers and consumers who often have little idea where the food on their plates comes from.**

In 2015, the District 12 BOTF event will take place at Pleasant View Dairy in Jonesville on Saturday August 29th from 9:00 to 1:00.
Fighting back against emerging pests

The spotted wing drosophila and the brown marmorated stink bug are two invasive pests that pose the biggest threats to Michigan’s fruit production. Michigan growers will likely have to implement new management programs to control these pests from harming their fruit crop.

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.

The brown marmorated stink bug has a host range of more than 300 known plants, including fruits grown in Michigan.
## Additional MSU Extension Staff Serving Monroe County:

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pat Benton</td>
<td>Breastfeeding Initiative</td>
<td>517-432-3243</td>
<td><a href="mailto:bentonpa@msu.edu">bentonpa@msu.edu</a></td>
</tr>
<tr>
<td>Roger Betz</td>
<td>Farm Business Management</td>
<td>269-781-0780</td>
<td><a href="mailto:betz@anr.msu.edu">betz@anr.msu.edu</a></td>
</tr>
<tr>
<td>Mary Bohling</td>
<td>Sea Grant Program</td>
<td>734-720-7689 x101</td>
<td><a href="mailto:bohling@anr.msu.edu">bohling@anr.msu.edu</a></td>
</tr>
<tr>
<td>Lisa Bottomley</td>
<td>Specialist – Youth Mentoring</td>
<td>517-432-7622</td>
<td><a href="mailto:lbottoml@anr.msu.edu">lbottoml@anr.msu.edu</a></td>
</tr>
<tr>
<td>Robert Bricault</td>
<td>Consumer Horticulture</td>
<td>734-222-3826</td>
<td><a href="mailto:bricault@anr.msu.edu">bricault@anr.msu.edu</a></td>
</tr>
<tr>
<td>Dr. Dan Buskirk</td>
<td>Faculty – Beef Production</td>
<td>517-432-0400</td>
<td><a href="mailto:buskirk@msu.edu">buskirk@msu.edu</a></td>
</tr>
<tr>
<td>Bill Cook</td>
<td>Sustainable Natural Resource Management</td>
<td>906-786-1575</td>
<td><a href="mailto:cookwi@anr.msu.edu">cookwi@anr.msu.edu</a></td>
</tr>
<tr>
<td>Christina Curell</td>
<td>Agricultural Water Quality</td>
<td>231-745-2732</td>
<td><a href="mailto:curellc@anr.msu.edu">curellc@anr.msu.edu</a></td>
</tr>
<tr>
<td>Melissa Elischer</td>
<td>Youth Dairy</td>
<td>517-432-4306</td>
<td><a href="mailto:elischer@anr.msu.edu">elischer@anr.msu.edu</a></td>
</tr>
<tr>
<td>Dr. Kevin Frank</td>
<td>Faculty – Turfgrass Management</td>
<td>517-355-0271 x1147</td>
<td><a href="mailto:frankk@msu.edu">frankk@msu.edu</a></td>
</tr>
<tr>
<td>Dr. Kristin Getter</td>
<td>Floriculture Production</td>
<td>517-355-5191 x1341</td>
<td><a href="mailto:getterk@msu.edu">getterk@msu.edu</a></td>
</tr>
<tr>
<td>Michelle Gordon-Releford</td>
<td>Health and Nutrition Supervisor</td>
<td>734-222-3915</td>
<td><a href="mailto:gordon8@anr.msu.edu">gordon8@anr.msu.edu</a></td>
</tr>
<tr>
<td>Merrill (Charles) Gould</td>
<td>Livestock Residue &amp; Energy Use</td>
<td>616-994-4547</td>
<td><a href="mailto:gouldm@anr.msu.edu">gouldm@anr.msu.edu</a></td>
</tr>
<tr>
<td>Tom Guthrie</td>
<td>Swine and Equine Management</td>
<td>517-788-4292</td>
<td><a href="mailto:guthri19@anr.msu.edu">guthri19@anr.msu.edu</a></td>
</tr>
<tr>
<td>Lauren Hale</td>
<td>Data Integrity Specialist for Financial Literacy Programs</td>
<td>734-222-9595</td>
<td><a href="mailto:halelau1@anr.msu.edu">halelau1@anr.msu.edu</a></td>
</tr>
<tr>
<td>Phil Kaatz</td>
<td>Forage Production</td>
<td>810-667-0341</td>
<td><a href="mailto:kaatz@anr.msu.edu">kaatz@anr.msu.edu</a></td>
</tr>
<tr>
<td>Gerald Lindquist</td>
<td>Grazing Management</td>
<td>231-832-6139</td>
<td><a href="mailto:lindquis@anr.msu.edu">lindquis@anr.msu.edu</a></td>
</tr>
<tr>
<td>Jackelyn Martin</td>
<td>District 12 4-H Supervision &amp; Leadership and Civic Engagement Educator</td>
<td>734-222-3877</td>
<td><a href="mailto:marti623@anr.msu.edu">marti623@anr.msu.edu</a></td>
</tr>
<tr>
<td>Mike Metzger</td>
<td>Field Crops and Small Ruminants</td>
<td>517-788-4292</td>
<td><a href="mailto:metzgerm@anr.msu.edu">metzgerm@anr.msu.edu</a></td>
</tr>
<tr>
<td>Kendra Moyses</td>
<td>Early Childhood Development and Life Skills Education</td>
<td>517-432-7654</td>
<td><a href="mailto:kmoyses@anr.msu.edu">kmoyses@anr.msu.edu</a></td>
</tr>
<tr>
<td>Martin Nagelkirk</td>
<td>Wheat Production</td>
<td>810-648-2515</td>
<td><a href="mailto:nagelkir@anr.msu.edu">nagelkir@anr.msu.edu</a></td>
</tr>
<tr>
<td>Jeannie Nichols</td>
<td>Food Safety &amp; Cottage Food Law</td>
<td>517-439-9301</td>
<td><a href="mailto:nicho115@anr.msu.edu">nicho115@anr.msu.edu</a></td>
</tr>
<tr>
<td>Jill O'Donnell</td>
<td>Christmas Tree Production</td>
<td>231-779-9480</td>
<td><a href="mailto:odonne10@anr.msu.edu">odonne10@anr.msu.edu</a></td>
</tr>
</tbody>
</table>
## Extension Educators Serving Monroe County, Continued

### Additional MSU Extension Staff Serving Monroe County

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glenn Pape</td>
<td>Land Use &amp; Stewardship Education</td>
<td>517-546-3950</td>
<td><a href="mailto:papeglen@anr.msu.edu">papeglen@anr.msu.edu</a></td>
</tr>
<tr>
<td>Dennis Pennington</td>
<td>Biomass to Energy Production</td>
<td>269-838-8265</td>
<td><a href="mailto:pennin34@anr.msu.edu">pennin34@anr.msu.edu</a></td>
</tr>
<tr>
<td>Ben Phillips</td>
<td>Commercial Vegetable Production</td>
<td>989-758-2500 x202</td>
<td><a href="mailto:phil406@anr.msu.edu">phil406@anr.msu.edu</a></td>
</tr>
<tr>
<td>Bethany Prykucki</td>
<td>Government &amp; Public Policy</td>
<td>231-258-3320</td>
<td><a href="mailto:prykucki@anr.msu.edu">prykucki@anr.msu.edu</a></td>
</tr>
<tr>
<td>Insa Raymond</td>
<td>Youth Academic Success</td>
<td>517-439-9301</td>
<td><a href="mailto:raymo65@anr.msu.edu">raymo65@anr.msu.edu</a></td>
</tr>
<tr>
<td>Brenda Reau</td>
<td>MSU Product Center</td>
<td>734-755-8285</td>
<td><a href="mailto:reau@anr.msu.edu">reau@anr.msu.edu</a></td>
</tr>
<tr>
<td>Laurie Rivetto</td>
<td>4-H Career Exploration &amp; Workforce Preparation</td>
<td>734-729-3632 x102</td>
<td><a href="mailto:rivettol@anr.msu.edu">rivettol@anr.msu.edu</a></td>
</tr>
<tr>
<td>Pam Sarlitto</td>
<td>Foreclosure and Homebuyer Education</td>
<td>734-222-3832</td>
<td><a href="mailto:sarlitto@anr.msu.edu">sarlitto@anr.msu.edu</a></td>
</tr>
<tr>
<td>Dr. Jeannine Schweihofer</td>
<td>Meat Quality</td>
<td>810-989-6935</td>
<td><a href="mailto:grobbelj@anr.msu.edu">grobbelj@anr.msu.edu</a></td>
</tr>
<tr>
<td>Mike Staton</td>
<td>Soybean Production</td>
<td>269-673-0370 x2562</td>
<td><a href="mailto:staton@anr.msu.edu">staton@anr.msu.edu</a></td>
</tr>
<tr>
<td>Janelle Stewart</td>
<td>Leadership and Civic Engagement</td>
<td>517-264-5307</td>
<td><a href="mailto:stewa191@anr.msu.edu">stewa191@anr.msu.edu</a></td>
</tr>
<tr>
<td>Steve Stewart</td>
<td>Coastal Communities Education</td>
<td>586-469-7431</td>
<td><a href="mailto:stew@anr.msu.edu">stew@anr.msu.edu</a></td>
</tr>
<tr>
<td>Julie Thelen</td>
<td>Youth Livestock and Vet Science</td>
<td>517-432-1626</td>
<td><a href="mailto:thelenju@anr.msu.edu">thelenju@anr.msu.edu</a></td>
</tr>
<tr>
<td>Marilyn Thelen</td>
<td>Integrated Crop &amp; Livestock Systems</td>
<td>989-227-6454</td>
<td><a href="mailto:thelen22@anr.msu.edu">thelen22@anr.msu.edu</a></td>
</tr>
<tr>
<td>Phil Tocco</td>
<td>Food Safety</td>
<td>517-788-4292</td>
<td><a href="mailto:tocco@anr.msu.edu">tocco@anr.msu.edu</a></td>
</tr>
<tr>
<td>Bob Tritten</td>
<td>Tree &amp; Small Fruit Production</td>
<td>810-244-8555</td>
<td><a href="mailto:tritten@anr.msu.edu">tritten@anr.msu.edu</a></td>
</tr>
<tr>
<td>Chris Weeks</td>
<td>Specialist – Aquaculture</td>
<td>517-353-2298</td>
<td><a href="mailto:weekschr@msu.edu">weekschr@msu.edu</a></td>
</tr>
<tr>
<td>Jennifer Weichel</td>
<td>Volunteer Development &amp; Capacity Building</td>
<td>517-432-7606</td>
<td><a href="mailto:weichel@anr.msu.edu">weichel@anr.msu.edu</a></td>
</tr>
</tbody>
</table>

**MISSION:**

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

MSU is an affirmative-action, equal-opportunity employer, committed to achieving excellence through a diverse workforce and inclusive culture that encourages all people to reach their full potential. Michigan State University Extension programs and materials are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status or veteran status. Issued in furtherance of MSU Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Ray Hammerschmidt, Interim Director, MSU Extension, East Lansing, MI 48824. This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by