

Midland County

2016 ANNUAL REPORT



MESSAGE FROM THE DISTRICT COORDINATOR

We hope you enjoy reading this latest annual report outlining how MSU Extension in Midland County and throughout the state continue to make Michigan thrive as an excellent place to live, raise a family and conduct business.

MSU Extension faculty and staff translate the scientific information gleaned from MSU AgBio Research and other Campus Units into real world applications—something we’ve done for over 100 years.



Throughout the history of the Cooperative Extension Service, founded by the Smith-Lever Act of 1914, MSU Extension has worked hard to support an environment of collaboration where innovation and creativity can flourish.

This report provides an overview of the variety of MSU Extension programming that residents of Midland County participated in over the last year. Thank you for your continued support of MSU Extension programs in Midland County.

Diane Smith
District 9 Coordinator
Michigan State University Extension

CONTACT US

515 Center Ave., Suite G102
Midland City, MI 48706
989-895-4026

msue.anr.msu.edu/county/info/Midland

TABLE OF CONTENTS

CONNECTING WITH RESIDENTS

4-H Children and Youth 3-4

Health and Nutrition 5-7

Business Development..... 8

Natural Resources.....9

Agriculture and Horticulture..... 10-12

Staff.....13-15

DEVELOPING YOUTH AND COMMUNITIES

When you support MSU Extension 4-H programs, youth learn life skills that prepare them for the workforce and develop leadership skills that increase their likelihood of becoming civically active. 4-H'ers also demonstrate less high-risk behaviors such as drug use as well as avoid or reduce involvement with the court system.

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 Examples of such programming are:

- » **We Do Robotics**—A STEM Grant for a We Do Robotics program was granted to Midland County to purchase classroom 15 kits and laptop computers. Kits were used in two summer camps, one in partnership with Creative 360 and one as a week long Robotics Camp for Cloverbuds (5-8 year olds). Both were taught by 4-H teens. In partnership with North Midland Family Center, the kits and computers were used in the STEM labs at that center as well as the Coleman Family Center for their summer programs. This kits and computers will be used by 4-H clubs and school classrooms throughout the upcoming year.
- » **4-H Exploration Days** — Exploration Days is for young people aged 11 to 19 and involve about 2,500 participants in Michigan. Exploration Days is designed to help young people learn new ideas and techniques, increase their interest in and readiness for college, explore career options, and develop their decision making, independence and teamwork skills. They also meet and interact with people from different backgrounds and areas throughout Michigan. 4-H staff and volunteers are on hand to provide guidance and oversight. In June 2016, Midland County 4-H had 27 delegates attend Exploration Days.

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 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.

Developing Youth and Communities, continued

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

Learning Life Skills and Leadership

- » **Midland County 4-H Clubs** — Midland County has a tradition of Community Clubs as the primary club structure. Within a community club youth have the opportunity to work with a variety of adults, focusing on Livestock projects to photography to robotics, etc., while building relationships with the same core of adults. The clubs in Midland range from 6 youth to over 100 youth in one club, with up to 15 adults in the larger clubs. Youth have the opportunity to cross over to other clubs for more in-depth information if it is a project not represented in their own club, with no additional registration fees. **In 2016 we almost met our goal of 900 youth and 200 volunteers participating in our 52 clubs!!!**
- » **4-H Day Camp**—Both Day Camp and Overnight Camp were held at Camp Neyati in June. Day Campers were bussed to and from camp for one day, with adults and counselors on the bus with them. When they arrived, the remainder of the counselors were there to welcome them with a breakfast snack. Following the opening, the youth rotated through a nutrition lesson, a science lesson, and a craft, lunch, singing and a swim, before they headed back to Coleman and Midland bus stops. **Day Camp this year topped 50, five to eight year olds with 12 teen counselors,**
- » **4-H Overnight Camp**—Overnight Counselors had an evening of training and fun before the Overnight Youth arrived the next morning. Many of the Educational Strands taught during the overnight camp were led by teens who are building their leadership skills. Some of the strands that youth could choose from this year were Building Bat Houses, Theatre Arts, Cooking with Chef Ben, Rockets to the Rescue, and Scrapbooking. **Overnight camp had 85 youth, 35 teen counselors and 13 adults.**
- » **4-H Day At Dow Gardens**—25 adults and 75 youth - Display tables were set up in the Dow Gardens for families to learn about 4-H. Water bug collections, food safety wheel, life skills wheel, healthy living and literacy activities, horse science, global education and financial literacy were all featured.

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



Keeping People Healthy

Teaching valuable healthy-eating skills

In 2015, 16.2 percent of people in Michigan were considered to be living below the poverty level. More than 1.5 million Michigan residents qualify to receive Supplemental Nutrition Assistance Program (SNAP) benefits.

SNAP-Ed

MSU Extension's Supplemental Nutrition Assistance Program Education (SNAP-Ed) programs from October 2015-August 2016 reached 126 adults and 427 youth in Midland County who participated in a series of educational sessions, and over 367 adults and 332 youth in the county who participate in one time presentations.

Through our programs, adults and youth learn how to 1) make the most of their food dollars, 2) understand food labels, 3) make healthy food choices, 4) prepare and portion food, 5) plan menus, 6) understand recipes and 7) keep food safe. The curriculums and teaching tools used to teach the programs included:

- Curriculums: *Eat Healthy Be Active*, *Cooking Matters*, *Project Fresh*, *Healthy Harvest*
- Curriculum Highlight: Show Me Nutrition Curriculum—Youth programming continues to be a cornerstone of educational programming in Midland County. Children participate in a six-week series of lessons about important health themes such as nutrition, food safety, physical activity, media influence and body image.

Expanded Food and Nutrition Education Program (EFNEP)

The Expanded Food and Nutrition Education Program (EFNEP) is designed to assist limited resource audiences in acquiring the knowledge, skills, attitudes, and changed behavior necessary for nutritionally sound diets, and to contribute to their personal development and the improvement of the total family diet and nutritional well-being. The Health and Nutrition Institute at Michigan State University Extension is the implementing agencies in Michigan.

In Midland, a total of 56 adults and 227 youth from kindergarten to 12th grades participated in EFNEP programming. Evaluation results showed that:

- ⇒ 97% improved in one or more nutrition practices
- ⇒ 85% improved their knowledge or ability to choose foods according to Federal Dietary Recommendations

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.

Partners in Health Education

- Arnold Center
- Breast Feeding Alliance
- Caregivers Network of Midland
- Charter Square Apartments
- Community Health Improvement Plan
- Cleveland Manor
- Coleman Area Library
- Community Mental Health of Central Michigan
- Creative 360-Artshop
- Disability Network
- Dow Gardens
- Emergency Food Pantry Network of Midland
- Family & Children's Services of Mid-Michigan
- Family Fare Grocery Store
- First United Methodist Church
- Food Security Council
- Grace A Dow Memorial Library
- Greenhill Apartments
- Greater Midland Coleman Family Center
- Greater Midland Community Center
- Greater Midland North Community Center
- Heaven's Elect Christian Learning Center
- House of Mercy Women's Shelter
- Juvenile Corrections Center
- KinderKare
- Kroger
- Longview Early Childhood Center
- Meijer
- Meridian Early College High School
- Messiah Lutheran Church
- Mid-Michigan Community Action Agency
- Mid-Michigan Health
- Midland Area Community Foundation
- Midland Area Farmers' Market
- Midland Area Homes
- Midland Center for the Arts
- Midland County Health Department
- Midland County Parks and Recreation
- Midland County Great Start Collaborative
- Midland County Service Building
- Midland Public Schools
- Northwood University
- Pregnancy Resource Center of Mid-Michigan
- Sanford Elementary Early Childhood Center
- Salvation Army
- Shelter House for Woman
- St. John Episcopal Church SAMS Food Pantry
- The Arc of Midland
- The Rock
- West Midland Family Center
- WIC

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.

ENSURING SAFE AND SECURE FOOD

MSU Extension enhances residents' access to an adequate supply of safe, affordable food. Program participants focus on food safety measures, learn proper food preparation and food preservation techniques, and work with 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

The Cottage Food Law allows home-processed foods to be sold to the public, which has increased the need for food safety education. MSU Extension Cottage Food Law workshops supplied 3 Midland County residents with up-to-date, scientifically backed information on food safety for their food business.

ServSafe certification was also taught by MSU Extension with 2 Midland County residents completing the 8 hour course and another 2 residents taking Cooking For Crowds.

MSU Extension reducing foodborne illnesses

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.

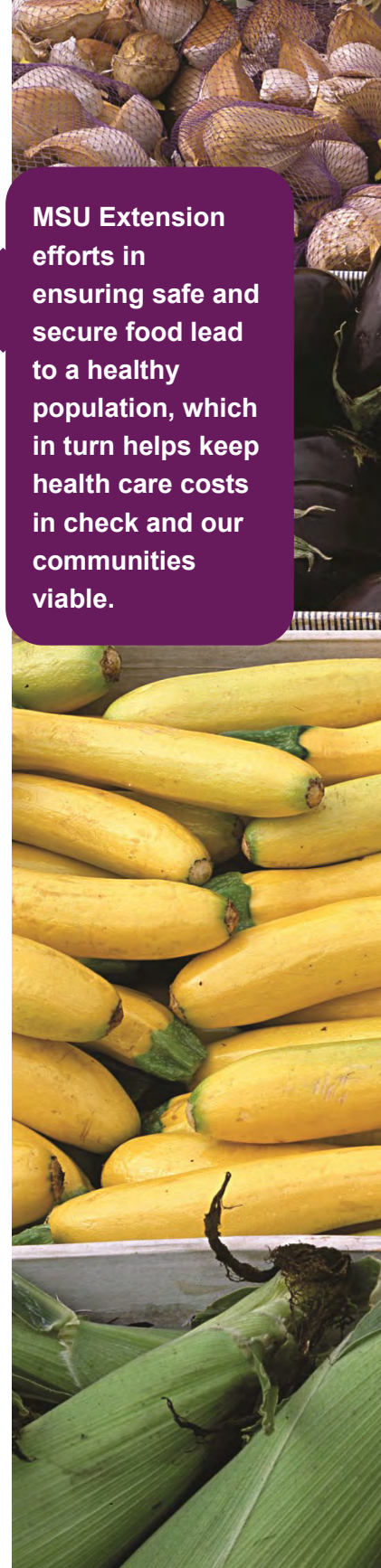
204 Midland County youth and adults enjoyed the following Food Safety courses MSU Extension offered:

- Tomatoes and Other Foods
- Pickling—It's not Just for Cucumbers
- Preserving Food at Home—Canning Basics
- Jams and Jellies
- Blanching and Freezing

MSU Extension efforts in ensuring safe and secure food lead to a healthy population, which in turn helps keep health care costs in check and our communities viable.



In 2013, nearly 4,000 Michigan residents learned about preserving food and preparing safe food for public consumption.



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. This fuels the economy by creating and retaining jobs, and helps ensure a healthy tax base.

Michigan's growing craft beer industry, made up of dedicated small business owners, is improving the economy and instilling a sense of local pride in regions throughout Michigan.

Meeting the needs of Michigan specialty food businesses

Consumers are eager to purchase made-in-Michigan products, and small businesses in Michigan are attempting to meet this demand by using all Michigan-made ingredients in their products. Michigan's growing specialty food businesses, made up of dedicated small business owners, are improving the economy and instilling a sense of local pride in regions throughout Michigan, which are seeing their locally made food get national attention.

MSU Extension Educator, Mary Dunkel, provided business counseling for 4 Midland County residents.

Meeting the needs of Michigan craft brewers

Consumers are eager to purchase made-in-Michigan products, and craft brewers in Michigan are attempting to meet this demand by using all Michigan-made ingredients in their suds. Michigan's growing craft beer industry, made up of dedicated small business owners, is improving the economy and instilling a sense of local pride in regions throughout Michigan, which are seeing their locally made brews get national attention.

Michigan brewers are looking for high-quality, affordable malt and hop products with consistent quality and availability. If these needs are met, then the craft brewing industry will continue to grow to support positive economic development for local communities.

2 Midland County residents attended the Great Lakes Hop and Barley Conference where MSU Extension provides educational sessions.

Michigan brewers are looking for high-quality, affordable malt and hop products with consistent quality and availability.





Michigan's Natural Resource Protection

Phragmites & Invasive Species Workshops

Few invasive plant species have managed to change the Saginaw Bay shoreline as much as *Phragmites australis*, also known as common reed or simply *Phragmites*. Over the past few years, several *Phragmites* treatment projects have helped reclaim Saginaw Bay shoreline and wetland habitat from this invasive grass.

MSU Extension Educator, Kay Hitzen, organized a series of workshops for 43 Midland County residents and landowners to provide information on invasive species and, in particular, *Phragmites*. Practical information was given for landowners on how to treat *Phragmites* on their property and how to enroll in larger group treatment programs.

Drill Conductor Training courses

One Midland County resident participated in the Michigan Sea Grant coordinated Drill Conductor Training course. Courses were held throughout the Great Lakes region to help Great Lakes commercial fishing vessel captains fulfill U.S. Coast Guard regulations related to instruction, drills and safety orientations, and onboard emergency instruction.

Lake Huron Regional Fisheries Workshop

Four Midland County residents attended the Lake Huron Regional Fisheries Workshop. The workshop engaged local fisheries stakeholders with fisheries research and management agencies. One of the workshops were delivered in Bay County on April 19. Participants included anglers, fisheries related businesses, resource management interests, educators and media.

SUPPORTING AGRICULTURE AND HORTICULTURE

Michigan agriculture continues to be a growing segment of the state's economy. MSU Extension teaches producers profitable and efficient business production practices while learning to optimize and reduce the use of pesticides and fertilizers to conserve and protect water resources. The number of households raising a portion of their own food and raising livestock or gardening for pleasure or relaxation continues to increase as well.

- » **Sugarbeet Advancement Program**—10 local farmers participated in the REACH sugarbeet agronomy sessions. The sugarbeet industry alone has a direct economic impact of over 550 million dollars. When compared to other sugarbeet production areas in the last 10 years, Michigan tops the charts for improved sugarbeet yields, quality and profitability. Much of these gains have come from extensive effort put forth by MSU Extension and the Sugarbeet Advancement Program working with the industry. In 2016, 25 research trials were conducted in the Saginaw Bay Area that Midland County is a part of. These efforts included variety testing, improving management techniques, and solving production constraints.
- » **Michigan Ontario Sugarbeet Research Reporting Session**—14 Midland County producers attended the Michigan Ontario Sugarbeet Research Reporting Session. Generally 12-14 speakers report on sugarbeet research at this event. It has become very popular to growers to attend this event because they can get a quick research update on a lot of different agronomy topics.
- » **Bean and Beet Symposium**—This symposium was held on February 19, 2016 at Horizons Conference Center. This trade show/conference, focusing on dry bean and sugarbeet production, included over 104 exhibitors and draws over 450 producers.
- » **Midland Thumb Vegetable Meeting**— These meetings attract at least 30 participants representing 190-300 acres of mixed fresh market vegetable production from Bay, Midland, Tuscola and Saginaw County. The meetings feature MSU Extension vegetable researcher and private industry education.

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



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.

Supporting Agriculture and Horticulture, continued

- » **Great Lakes Forage & Grazing Conference**—4 Midland County growers participated in this critical program for the forage based farm industries of Michigan. Forages for livestock feed include alfalfa, grass, corn silage, and pastures. In 2015, Michigan had 970,000 acres for hay, 41,097 acres for pasture, and 260,000 acres for corn silage totaling 1,271,097. Forages are the third largest commodity crop in Michigan after corn and soybeans and represented \$417,570,000 in revenue for farmers in 2015.
- » **Beginning Farmers Webinar Series**— 3 Midland County residents participated in the webinar seeking basic, start-up information for new farming enterprises. The audience was primarily people currently engaged, or considering engagement, in smaller scale commercial agriculture
- » **MSU Field Crops Webinar Series**— 2 Midland County residents participated in the six webinars where MSU Professors covered Overcoming Weed Management Challenges in 2016, Field Crop Disease Management Updates, Forage Improvement on a Budget, Nutrient Management Research in Field Crops, Evaluating Insecticide Seed Treatments and Cover Crop Termination Strategies.
- » **Soil Test Kits**—Test kits as well as additional publications on a wide variety of topics within MSUE's expertise are available at the local MSUE office or at shop.msu.edu (click the MSU Extension Bookstore link on the top right. This year the local office gave out over 50 home owner kits and farmer boxes.
- » **Integrated Pest Management (IPM) Academy**— Midland County residents completed a two-day program covering the fundamentals of IPM and the resources and technology for sustainable agricultural practitioners. This program is a collaboration between several Extension field-based educators and campus specialists. Academy participants gain a solid foundation in sustainable pest management, knowledge of MSU and its partners' resources, and the ability to share this knowledge with their farm clientele. The Academy's long-term goal is to increase sustainable agriculture through expanded awareness and adoption of IPM strategies that improve crop efficiency, minimize pesticide use and enhance environmental quality.

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



Supporting Agriculture and Horticulture, continued

- » **Michigan Master Gardener Program (MMGP)** —MMGP provides interested individuals an opportunity to take part in a focused, 13-week training experience that provides in-depth education in many aspects of horticulture including trees and shrubs, flowers, vegetables, fruit, soil, water, pests, indoor plants and lawns. Individuals who complete the training can get involved in local gardening activities through the Midland Master Gardener Association. Additional trainings related to this in the state included the following:
- 51 local residents completed their Master Gardener Re-Certification. This involved 15 volunteer hours educating others in their community and engaging in 5 continuing education hours in horticulture.
 - 2 local residents went even farther in their education and took the Master Gardener College that consisted of four educational tours and one workshop.
 - 32 residents attended the Smart Gardening for Pollinators session
- » **MSUE Lawn and Garden Consultations and Hotline**—MSUE in Midland County is fortunate to have dedicated local volunteers to provide one-on-one education for local residents. This is provided through three hours of office time where they meet with people and answer residents questions over the phone. In addition, at a state level, MSU Extension has Consumer Horticulture educators and trained Master Gardener Volunteers that are dedicated in helping answer any at-home garden questions. MSUE has an “Ask an Expert” button on the webpage msue.msu.edu, or call toll-free 1-888-MSUE4MI (888-678-3464). Staff and volunteers are available weekdays 9:00 am—12:00 pm and 1:00 pm—5:00 pm. Michigan residents can also receive valuable information and sign up for MSUE’s Home Gardening news at migarden.msu.edu.



Extension Educators Serving Midland County

Staff Located in the Midland County Office:

Lisa Treiber

Health and Nutrition Educator—Food Safety

Melissa Pavlik

Health & Nutrition Program Associate

Samantha Hebert, RD

Health & Nutrition Program Instructor

Dee Howe

4-H Program Coordinator

Sheila Salo

Health and Nutrition Data Entry Tech and Office Support

Extension Educators Serving Midland County

Name	Topic Area	Email
John Amrhein	Government & Public Policy	amrhein@msu.edu
Darren Bagley	Leadership & Civic Engagement	bagleyda@msu.edu
Lisa Bottomley	Mentoring & Capacity Building	lbottoml@msu.edu
Ann Chastain	Leadership & Comm. Engagement	chastain@msu.edu
Christina Curell	Water Quality	curellc@msu.edu
James DeDecker	Specialty Field Crops	dedecke5@msu.edu
Thomas Dudek	Greenhouse/Nursery	dudek@msu.edu
Phillip Durst	Ruminant	durstp@msu.edu
Dawn Earnesty	Health & Disease Worksite Wellness	wilcoxd4@msu.edu
Melissa Elischer	Youth Dairy	elischer@msu.edu
Elizabeth Ferry	Swine	franzeli@msu.edu
Kristin Getter	Greenhouse Specialist	getterk@msu.edu
Merrill Gould	Livestock/Bioenergy	gouldm@msu.edu
Frank Gublo	Product Center	gublofra@msu.edu
Tom Guthrie	Pork and Swine	guthri19@msu.edu
Philip Kaatz	Forage/Commercial Agriculture	kaatz@msu.edu
Gerald Lindquist	Grazing Management	lindquis@msu.edu
Erin Lizotte	Integrated Pest Management	taylo548@msu.edu
Michael Metzger	Small Ruminant	metzgerm@msu.edu
Stanley Moore	Dairy/Food and Animal Systems	moorest@msu.edu
Dorothy Munn	4-H Supervisor	munnd@msu.edu
Martin Nagelkirk	Wheat/Field Crops	nagelkir@msu.edu
Jill O'Donnell	Christmas trees/Environmental Quality	odonne10@msu.edu
Dennis Pennington	Biomass	pennin34@msu.edu
Ben Phillips	Vegetable Crops	phill406@msu.edu
Bethany Prykucki	Leadership & Comm. Engagement	prykucki@msu.edu
Bev Przystas	Career Exploration & Workforce Prep	przystas@msu.edu
Kurt Schindler	Government & Public Policy	schindlk@msu.edu
J Robert Sirrine	Hops Production and Marketing	sirrine@msu.edu
Jodi Schultz	Youth Capacity Building	schultzj@msu.edu
Dennis Stein	Business Management	steind@msu.edu
Julie Thelen	Veterinary Science	thelenj@msu.edu
Marilyn Thelen	Agriculture Systems	thelen22@msu.edu
Kable Thurlow	Beef/Food and Animal Systems	thurlowk@msu.edu
Lisa Treiber	Food Safety	treiber@msu.edu
Mary Wilson	Master Gardener	wilsonml@msu.edu