



MSU TOLLGATE
**ANNUAL
REPORT**
2017



MICHIGAN STATE
UNIVERSITY

Extension

Dear Friends,

Welcome to MSU Tollgate! We have experienced a wonderful 2017 full of new activities, expanded offerings, and an increased footprint in our local community. I hope as you read the 2017 annual report, you find something inspiring or unique about the happenings here. Looking back on the last year, we have had some remarkable accomplishments, which are a direct testament to the support of you, our valued stakeholders.

MSU Tollgate Farm is a special place that brings together a community of passionate and responsible stewards of our agricultural heritage. Our goal is to serve the needs of our community through programming that uses research to address relevant issues. Each day we embark on an educational journey exploring the forest, fields, pond, and open spaces. Whether it is with a group of young people, teachers, or families, we strive to bring the knowledge from MSU to you in a way that is engaging, exciting, and impactful.

Thank you for being a part of the MSU Tollgate community. As we grow our program offerings to foster awareness and understanding of the natural world, from healthy and sustainable food systems to protection of our precious resources, I hope that you will continue to support this important work.

Mike Mathis

Interim Education Director
MSUE Tollgate Farm and Education Center



MSU Tollgate Statement of Purpose

MSU Tollgate provides non-formal learning opportunities for children, families, and adults, offering the unique opportunity to experience agriculture hands-on in an urban environment.

MSU Extension Mission

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

What is Extension?

Michigan State University (MSU) Extension helps people improve their lives by bringing the vast knowledge resources of MSU directly to individuals, communities, and businesses. For more than 100 years, MSU Extension has helped grow Michigan's economy by equipping Michigan residents with the information that they need to do their jobs better, raise healthy and safe families, build their communities, and empower our children to dream of a successful future.

CONTENTS

Letter From Director / Mission	2	Supporting School Achievement	8
Success by Numbers	3	Creating a Sense of Place	10
Early Childhood Education	4	Lifelong Learning	12
Sustainable Agriculture	5	Serving People with Special Circumstances	14
Youth Development	6	Site improvements	15

SUCCESS BY THE NUMBERS

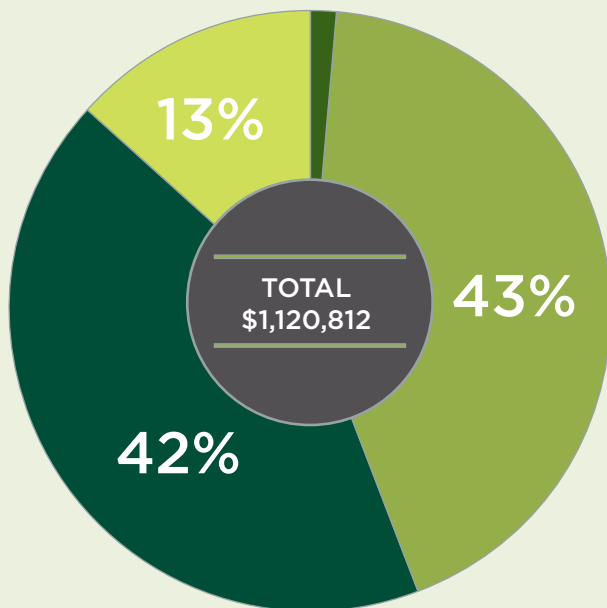
Volunteering

Program	Number of Volunteers	Total Hours	Value
Teen Stewards	56	4800	\$110,736
Garden and Maple Syrup	220	3500	\$80,745
Pumpkinfest	300	1050	\$24,224
4-H Club	35	800	\$18,456
Sustainable Agriculture	2	300	\$6,921
Evenings in the Garden	40	120	\$2,768
Other Programming	3	20	\$461
Totals	656	10590	\$244,311

Visitation

Initiative	Attendance
School to Farm Field Trips	6,200
Pumpkinfest	6,000
Conference Center	3,500
Garden Volunteer Events	2,337
Volunteers	621
Farm Day Camps	595
Sustainable Agriculture	510
Evenings in the Garden	416
Pancake Feast	360
Early Childhood	280
Other lectures and tours	200
Total	21,019

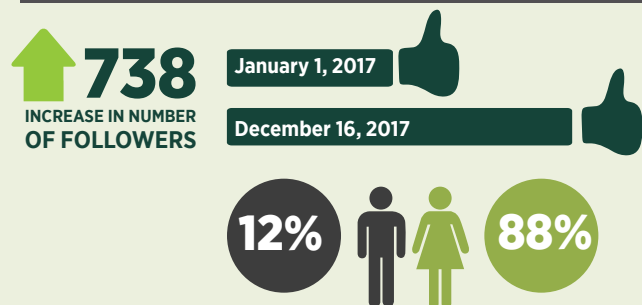
2017 MSU Tollgate Funding



Initiative	Attendance
Earned Revenue	\$478,937
MSU Extension	\$476,715
Americana Foundation	\$147,500
Other Donations	\$17,660
Total	\$1,120,812

Social Media and Website Statistics

FACEBOOK



MSU TOLLGATE WEBSITE



THE NEED: EARLY CHILDHOOD EDUCATION



Farm Sprouts: A Recipe for Success

The Farm Sprouts Preschool Program at MSU Tollgate is a twice-weekly drop off program where 3-5 year olds develop scientific thinking, discover the natural world, and play outdoors! 2017 included a spring and fall season of Farm Sprouts, which included 76 total participants. The program is unique in several ways. A low child-to-teacher ratio means we are able to meet the needs of each individual child. In addition, seasonally based investigations make every day and every season special. We do all of this because academic research backs up the effectiveness of our approach. Findings in research studies show that experiential learning, in an outdoor setting, promotes the development of social, emotional, and physical skills, as well as fostering a lifelong connection to nature.

In October 2017, MSU Tollgate's Farm Sprouts received recognition for being an exceptional example of best practice in early childhood education. The National Science Teachers Association journal, *Science and Children*, published an article about our first fall season of Farm Sprouts. Titled, "How do plants and animals prepare for winter? Local resources support an outdoor inquiry-based project" the article discussed how we meet the Next Generation Science Standards through the programs curriculum. The journal serves teachers, administrators, and supervisors across the country, reaching approximately 19,000 readers. Recognition from our peers in this way is a true honor. Integration of play, science, inquiry, agriculture, and nature is proving to be a recipe for success.

“He also understood that the snacks came from the farm, which is huge as he always just thought food came from the store. He now understands that food grows at the farm and in our garden.”

- Farm Sprouts Parent

“They were both so enthusiastic about the learning and adventures! Both gained social skills and methods of inquiry that they hadn't had before being Sprouts.”

- Farm Sprouts Parent

Farm Sprouts by the Numbers



Story Hour

During the summer, MSU Tollgate Farm partnered with Novi Public Library to offer the second summer season of Children's Garden Story Hour, taking place bi-weekly over 10 weeks. Children, ages 2-5 years old, and their caregivers engaged in stories, music, and dance followed by hands-on activities led by early childhood education staff and volunteers. Activities included crafts, interactions with our farm animals, experiments, and scavenger hunts. For these young children, story hour provided them with valuable opportunities to connect with animals and the natural world in addition to supporting their development, including growth in early literacy and scientific thinking skills. This program served 114 youth registrants accompanied by 90 adults.



THE NEED: SUSTAINABLE AGRICULTURE AND CONSERVATION



Sustainable Agriculture in Action

The Community Supported Agriculture (CSA) program at MSU Tollgate continued its prolific growth this year, expanding to forty shares and supplying produce to over one hundred and fifty individuals. The CSA spans twenty weeks during the growing season, from late May until mid-October, supplying members with fresh, local, organically grown produce on a weekly basis. The team grew over twenty five thousand pounds of organic produce, comprising more than forty-five different crops and one hundred and twenty varieties for the most bountiful season yet.

An improved irrigation system, capable of emitting twenty thousand gallons of water a day, made all of this expanded production possible. Additionally, the planting of two hundred apple trees, made up of more than fifteen varieties, will provide a completely new opportunity for teaching about agriculture. We look forward to hosting technical apple production classes starting this spring with pruning! The sustainable agriculture program demonstrates production agriculture for field trips, summer camps, Farm Sprouts, high school senior projects, volunteers, professional groups. By getting these visitors in the field, we create deep connections to ecology and agriculture.



Growing the Future with Apprentices

In the second year of the program, the sustainable agriculture program hosted two apprentices, novice farmers who join the team for twenty two weeks, as well as a field manager, an apprenticeship graduate returning for their second year. Providing an immersive learning environment for the development of future farmers is the goal of our apprenticeship program. Apprentices not only grow vegetables but also engage in an intensive study of biology, marketing, finance, soil science, and more. The field manager oversees the daily operation of the farm while furthering their own knowledge and skill base. By the end of the season, this team of three is completely self-sufficient and reliant, capable of running the entire operation as a cohesive unit, from planting and harvesting, to processing and marketing.

Extension Master Gardeners Involved in Squash Bees Monitoring Project

On July 20, MSU Tollgate Farm and Education Center hosted training for Extension Master Gardeners (EMGs) interested in becoming citizen scientists and helping to protect native squash bee pollinators. This inaugural year of a 3-year USDA statewide project is a collaborative partnership between MSU Vegetable Entomology Researcher, Dr. Zsofia Szendrei, and EMG volunteers. EMGs across the state are helping scientists answer research questions about the habits of this squash bee which is the primary pollinator of squash and pumpkins grown commercially and in community and home gardens.

During the hands-on field day at MSU Tollgate, EMGs learned why squash bees are important, how to identify squash bees, honey bees and bumble bees versus other bees, what specific observational data to collect for the research project, and how to submit this data using their smart phone camera and app or paper collection form.

Training and data collection will continue in 2018 and 2019 with the cumulative research findings shared through research reports, publications and meetings. EMGs will also share their knowledge about squash bees with others through community outreach efforts. The primary goal of this comprehensive approach of citizen science data collection, squash bee recognition and stewardship will be increased productivity (and sales) by commercial producers and home gardeners.



Hundreds of pumpkins were grown for Pumpkinfest using an innovative organic no-till technique called roller-crimping that builds the soil, reduces compaction and suppresses weeds!

THE NEED: YOUTH DEVELOPMENT

Summer Camps

In the last five years our summer camp program has grown from a single week of camp serving 40 campers to eight weeks of camp serving more than 500 campers. From the beginning, the heart of our mission has remained the same, to invite campers to engage in hands-on learning that targets 4-H life skills and meets the Next Generation Science Standards. Our approach addresses a major issue, summer brain drain. Research has found that youth from at-risk communities often fall behind because of a lack of stimulating educational activities during the summer. Campers at MSU Tollgate engage in hands-on learning, including a weeklong STEM project, which uses the scientific process.

“Why do birds build nests?” was just one of the driving questions used this summer as a part of a STEM project. During the camp week, campers make observations that help them develop their own models of bird nests. What kind of natural challenges do birds face? **What makes an effective nest?** The project culminates by testing model bird nests that they engineer. While holding a raw chicken egg, campers drop the nest from as much as 10 feet in the air. After their tests, campers reflect on the results. **Did the egg break? Did the nest fall apart?** They compare and contrast their nest designs, inevitably leading to more questions. “Birds have no thumbs! How do they do it?”

In addition to engaging in science and engineering projects, campers cook with produce they harvest, care for farm animals, canoe, shoot archery, build friendships, and much more. By learning alongside MSU Tollgate’s team of certified teachers and educational leaders, campers gain an understanding of where their food comes from and leave camp empowered with skills for self-directed, life-long learning.

“*Friendly, warm, competent.*”
- Comment from camper parent

“*It was more than I expected.*”
- Comment from camper parent

“*She doesn’t realize how much she is learning because it is all so experiential!*”
- Comment from camper parent



MSU Tollgate Takes to the Road: Winged Wonders Camp at Kellogg Biological Station

“We are learning so much about birds I feel like I am a bird. Now, I just need to fly!” squealed a camper scrambling out of the woods after building a life size eagle’s nest. In 2017, MSU Tollgate Farm summer camp banded together with MSU Kellogg Biological Research Station to offer its first overnight experience for campers called Winged Wonders. Sixteen hardy campers investigated phenomena about creatures that flap, fly, and float through the air at both MSU Tollgate and Kellogg Biological Station.

Campers spent the first and last day of camp at MSU Tollgate investigating domestic farm birds, embryology, avian adaptations and habitats on the farm. As true field scientists, the campers took to the road, singing songs and sharing bird calls as they made their way by bus to the Kellogg Bird Sanctuary. While at the sanctuary, the campers slept out under the stars and compared the birds they observed with those seen at the farm. The young ornithologists interacted

with research scientists, met raptors up close and personal, made new friends, and had lots of fun!

MSU Tollgate and Kellogg Biological Station share many of the same goals. Both offer high quality place-based education opportunities and back their programming with rigorous scientific research. By collaborating, MSU Tollgate and Kellogg Biological Station have the opportunity to network, share, and expand resources. Together we can reach more people with deeper educational experiences.





MSU Tollgate Grows Teen Leaders: Spotlight on Gillian Thomas

Thirteen-year-old Steward-in-Training (SIT) Gillian Thomas always has her head on a swivel. On one hot afternoon at summer camp, the lead counselor tends to a needy camper. Gillian stays observant and when she notices that the camper group is becoming antsy, she takes action. She quickly has the group enjoying a game of Camouflage (Advanced Hide and Seek). Because of her initiative and attention, she is able to avoid a chaotic situation and the campers have an unforgettable experience for all of the right reasons.

Gillian is one of fifty-five Stewards and SIT's who volunteered at MSU Tollgate's 2017 Summer Camp. The teenagers act as mentors to the campers and assistant counselors to the Educational Leaders. By taking on these responsibilities, they learn patience, hard work, critical thinking, and initiative. In addition to their work with campers, the teens receive leadership training, listen to career speakers, and participate in peer team-building activities.

When asked about ways in which she grew by serving at summer camp, Gillian shared, "While I have served as an SIT, my leadership skills have greatly grown. I have seen them grow not only with the kids but also with my peers. With all of the training done at the overnight training and throughout the summer I find it easy to now step up to a task and conquer it. Leading a group and taking responsibility is something else that I have found myself excelling at as well." If Gillian meets others who are thinking of applying to be an SIT or steward, she has a few bits of advice to share, "I would definitely tell them that this is a great program and I strongly encourage them to try it out. I have seen a lot of development in everyone who takes part in this program."

In 2017:

- Average number of stewards and stewards-in-training per week 15
- Total number of teen helper slots per summer 120
- Number of volunteer stewards (15 – 19 years) 24
- Number of registered stewards-in-training (12-14 years) 32
- Number of steward volunteer hours 4,800

Tollgate Farm 4-H Club

MSU Tollgate is home to its very own 35-member 4-H club. While small in number the group contributes to MSU Tollgate in a big way. Club members assist with farm chores, raise livestock, grow produce, and learn about plant science, animal science, business, and more. Youth financially support the clubs activities by selling agricultural products that they grow, make, or raise on the farm. The accomplishments of the MSU Tollgate Farm 4-H Club are a result of hard work, dedication, and the unique hands-on opportunities available at MSU Tollgate Farm.

Other notable achievements include:

- 800 hours of volunteer work, maintaining a vegetable garden, caring for livestock and poultry, an participating in public events
- Distribution of seed packets to more than 42 schools and community gardens
- Multiple youth submitting Plant Science projects to the Oakland County and Michigan State Fairs, one youth receiving an award for Oakland County Gardener of the year
- Multiple youth taking livestock projects to the Oakland County (goat, sheep, calf) and Michigan State Fair (goat)
- 7 youth received Urban Farming Scholarships through the Michigan State Fair

Beyond knowledge, these activities build life skills, such as teamwork, problem solving, goal setting and more!





THE NEED: SUPPORTING



School to Farm Field Trips: Creating Context

During 2017, over 6,200 people participated in school to farm field trips at MSU Tollgate. Every visit includes authentic interactive learning designed to help adults and children place science principles in a real-world context. Each program meets the State of Michigan Educational Standards for schools and is designed with research backed methods and content. During experiential place-based programs, inquisitive minds embark on agricultural-based science journeys designed to inspire the inner scientist.

Programs include:

- Science of Maple Sugaring
- Spring into Farming: The Nutrient Trail
- Sheep to Sweater
- Harvest Farm Ecology
- Bees and Beekeeping

New in 2017, The Journey of Water investigates the properties and ecology of one of Michigan's precious natural resources.

School and community programs at MSU Tollgate include:

- Hands-on experiential learning
- Research-based methods and content
- Best practices for teaching science outdoors
- Connections to classroom learning

IN 2017, SCHOOL AND COMMUNITY PROGRAMS REACHED:



“We absolutely loved the trip and how engaged everyone was with us.”

Group Leader

“It was a wonderful trip! The leaders were engaging and very helpful... The science experiment was totally age appropriate, and the kids had a lot of fun.”

Nicole Marsh, Lego League coach

SCHOOL ACHIEVEMENT



Collaborating Classrooms: Bridging the Gap

For schools who wish to dig deeper into farm-based education, the Collaborating Classrooms model is an exciting opportunity. Based on the work of Dr. Norm Lownds of the MSU Children's Garden, Collaborating Classrooms bridges the gap between traditional MSU Tollgate field trips and classrooms to provide deeper experiences. To accomplish this, MSU Tollgate instructors use online interactions, pre and post activities, and classroom visits. In 2017, students looked deeper into seed starting, vermicomposting, and chick hatching.

An example of Collaborating Classrooms took place in spring 2017 with Deerfield Elementary School. The school brought their first grade classes to MSU Tollgate as a part of an embryology unit. An MSU Tollgate instructor started the endeavor by challenging the classes to hatch chicks from eggs for the farm. With this challenge in mind, and in preparation for their field trip, students did research and incubated eggs at school. Upon arriving at the farm, students took a journey to learn about producers, consumers, and decomposers. They visited the chicken coop, goat barn, and garden to make observations of life cycles. To cap it off, the students had a classroom celebration and added seventeen chickens to MSU Tollgate's brood. By integrating place-based learning, classroom instruction, and technology, MSU Tollgate is taking non-formal education to the next level.

The Collaborating Classrooms model:

- Includes placed-based school to farm visits
- Engages students in active, collaborative inquiry learning
- Connects students to MSUE educators, scientists, researchers
- Develops STEM literacy
- Incorporates technology
- Utilizes guided data collection and analysis
- Bridges classroom learning with farm to school visits

“I really appreciate the clear activity plan – much better than other places I've taken students over the years. Students learned all about the four planned stations and knew what to expect before we arrived which helped.”

B. Gottschalk, Susick Elementary



Teaching Science Outdoors

A second piece to the 2017 MSU Tollgate and Kellogg Biological Station partnership was a four-day teacher professional development workshop titled Teaching Science Outdoors. The workshop offered research-based best practices that utilize the Next Generation Science Standards, up to date technology, and data collection and analysis tools. Teachers traversed MSU Tollgate farm observing phenomena, collecting data, and sharing teaching ideas. By offering Teaching Science Outdoors, MSU Tollgate strengthens its connection to local schools and teachers, enabling future school to farm collaborations. Teaching Science Outdoors is a perfect example of a partnership producing results greater than the sum of the parts.

In 2017, the Tollgate KBS Partnership:

- Provided outreach programs which bring the expertise at KBS and Tollgate Farm to bear on environmental issues of public importance.
- Provided youth and teachers with inquiry learning opportunities in ecology, agriculture, and conservation biology to enrich their lives and increased their understanding of and engagement in science principles
- Integrated MSU, KBS, and MSU Extension Tollgate effectively
- Built cohesiveness and formed a bridges between these resources
- Expanded the reach of each



THE NEED: CREATING A SENSE OF PLACE



Learning About Local Foods at MSU Tollgate Farm Community Events

MSU Extension Tollgate Farm and Education Center provides non-formal learning opportunities for children, families, and adults, offering the unique chance to experience agriculture hands-on in an urban environment. This is especially true at MSU Tollgate's largest annual community events, which focus on two locally grown Michigan food products - maple syrup and pumpkins.

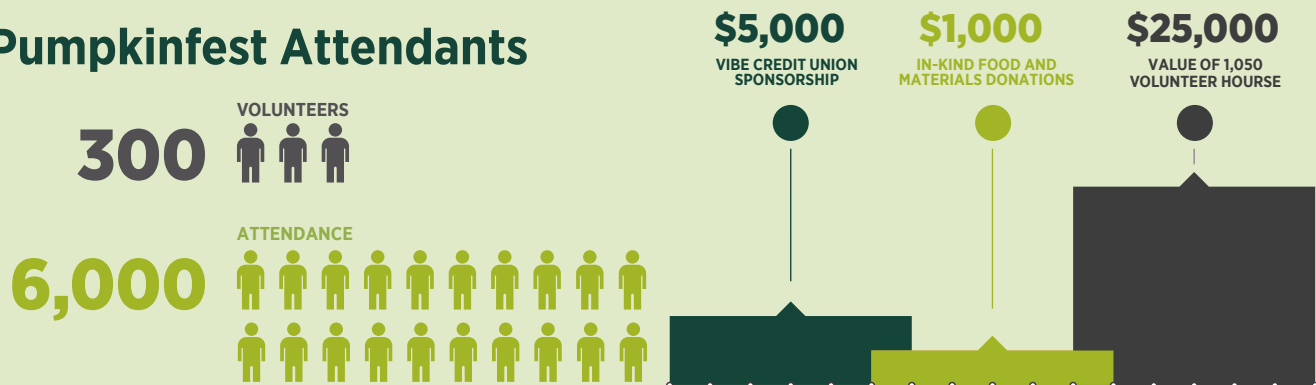


MSU Tollgate Farm Pumpkinfest

At the MSU Tollgate Farm Pumpkinfest, the pumpkin is front and center. Educational and enjoyable, the 2017 Pumpkinfest drew over 6,000 adults and children, many of whom visited the farm for the first time to learn about the pumpkin, local agriculture, and where their food comes from. Educational exhibits encompassed the apple and cider pressing, livestock, beekeeping, and entomology. Children's activities, library

story time, vintage baseball, and live music rounded out the fun and learning for everyone. Proceeds from Pumpkinfest benefit educational programming and help MSU Tollgate assist struggling schools and families with financial aid support for programs. Once again, Vibe Credit Union was the lead sponsor. We greatly appreciate this support!

Pumpkinfest Attendants



Maple Tapping and Pancake Feast

The annual Maple Tapping and Pancake Feast is an opportunity for families to connect to their Michigan agricultural heritage. When attending this event participants start with warm pancakes topped with delicious MSU Tollgate grown and harvested maple syrup. After filling up, visitors venture outdoors to experience the science, technique, and history of maple sugaring, taking a wagon ride out to observe the evaporation process, helping to tap a maple tree, and visiting a French colonial and Native American sugaring camp.





“We had an excellent time with the kids at Pumpkinfest. There was so much to do and every one of the staff and volunteers were so friendly and helpful. We will definitely be going again next year.”

Inge Lorre

The Sakura Garden

In partnership with Oakland County’s Economic Development Department, & Community Affairs (EDCA) 2018 will see the construction and installation of the Sakura Garden project at MSU Tollgate. The project will consist of a small grove of ornamental cherry trees surrounding a pavilion like structure inspired by traditional Japanese design. Oakland County and MSU Extension Tollgate Farm and Education Center have partnered to create space that provides opportunity to learn and reflect on elements of Japanese culture.

The project was conceived as a part of a larger effort within the city of Novi to become a more welcoming place to its significant Japanese population, most of whom have come here to work for the vast number of Japanese owned technology firms. As the city of Novi creates points of interest in their major shopping centers, the Sakura Garden will be capstone to this initiative. This project is in partnership with MSU, Oakland County, Japanese Consulate of Detroit, City of Novi and the Japanese Business Society of Detroit.

The garden has been made possible by the generous donations of 15 local firms and individuals who each sponsored a cherry tree at \$10,000. The donor list includes:

- **Daifuku North America Holding Company**
- **Deloitte & Touche LLP (Japanese Services Group)**
- **Hitachi Automotive Systems Americas, Inc**
- **KIP America**
- **L. Brooks Patterson – Oakland County Executive**
- **NGK Sparkplugs (USA), Inc.**
- **NHK International**
- **Nissan Technical Center North America**
- **One World Market**
- **State of Michigan (MEDC)**
- **Toyota Americas Corporation**
- **Toyota Gosei North America Corporation**
- **Toyota Boshoku America**
- **Toyota Industries Electric Systems North America**
- **Toyota Tsusho America, Inc.**

AT AN EVENT TO CELEBRATE THE END OF FUNDRAISING FOR THE SAKURA GARDEN, A TRADITIONAL TEA CEREMONY TOOK PLACE TO SHARE JAPANESE CULTURE.



The project will provide an excellent opportunity to introduce cross-cultural elements to the already superb educational offerings at MSU Tollgate. It will also provide a draw for Japanese families, schools and other organizations to visit the garden, walk amongst the cherry blossoms in the spring and experience a taste of home. We are confident that this project will benefit MSU Extension and Oakland County by introducing Extension resources to a new audience and helping to share a rich cultural experience with children.

THE NEED: **LIFELONG LEARNING OPPORTUNITIES**

Volunteers at MSU Tollgate – Expanding our reach

The staff at MSU Tollgate work hard to reach as many members of the Southeast Michigan community as possible. One big way that MSU Extension extends its impact is through dedicated volunteers. MSU Tollgate volunteers are numerous, inspired, and committed to MSU and the farm. Volunteers are involved in all aspects of keeping the site looking presentable and preparing it to meet MSU's educational objectives. Additionally, volunteers are a key component of the maple syrup program, assisting with school groups, helping to staff special events, and maintaining the site's horticultural gardens.

The programs where volunteers are most active at MSU Tollgate include the ornamental gardens, maple syrup production, Pancake Feast, Plant Sales, Summer Garden Celebration, and Pumpkinfest. The MSU Tollgate Garden Volunteers alone have over 220 members. The fundraising activities of garden

volunteers allowed the farm's horticultural plantings to be self-supporting. In 2017, the garden and maple syrup volunteers contributed over 3,500 hours of their time to MSU Tollgate valued at \$80,745. In total, all site volunteers contributed 10,590 hours of service for a value of \$244,311!

MSU Tollgate would not be the special place that it is without the hard work and dedication of our many volunteers.



VOLUNTEER HOURS

10,590



VALUE TO MSU EQUAL TO

\$244,311



Evenings in the Garden

MSU Tollgate's *Evenings in the Garden* adult education program expanded in 2017, bringing 14 new horticulture-related classes to the public. Over 400 visitors were served, gaining knowledge in a variety of horticulture and conservation-related topics including landscape design, children's gardening, pruning, identifying tree problems, container gardening, native landscape plants, soils, and water.

Twelve different speakers shared their knowledge and experience in the Evenings in the Garden program. Speakers included Dr. Norm Lownds, Dr. George Bird, Mary Gerstenberger, Dr. Tony Reznicek, Amanda Meier, Janet Macunovich, Jan Bills, Nick Zimmer, and Cheryl English. Throughout the 2017 season, 40 volunteers served as docents for each class, welcoming attendees, assisting the instructor, and facilitating the class, donating over 120 hours of time to this educational program.



14

NEW CLASSES



400

VISITORS SERVED



120

HOURS DONATED



Training Extension Master Gardener Volunteers

From August to December, 50 community members embarked upon an educational journey to become Extension Master Gardener (EMG). During the 14-week volunteer training course, participants learned from MSU experts the science-based, environmentally-sound gardening practices to successfully grow fruits, vegetables, flowers, house plants, lawns, trees and shrubs.

This group of passionate and community-minded individuals became engaged in the MSU Extension Master Gardener program to learn from horticultural experts in their fields. In keeping with the EMG Program mission, these trainees will “extend” that knowledge through completion of the required 40 volunteer hours, educating the public throughout the process. And, over 20% will utilize what they have learned to enhance a current business or start a new green-industry business.

During 2018, the trainees will focus on volunteer projects that educate others in the areas of:

- Environmental stewardship
- Improving food security
- Community enhancement
- Youth development through horticulture

MSU Tollgate Farm has long been a location where EMGs educate others through many demonstration gardens. In 2017, 124 certified EMGs contributed 2,974 volunteer hours to maintain and improve MSU Tollgate’s horticulture education opportunities. As many of the new trainees join MSU Tollgate’s volunteer community, the EMG program outreach impact continues to grow!



“Excellent speaker – very knowledgeable and engaging. Perfect.”

“Outstanding, a treasure, so passionate, the kids he (Dr. Norm Lownds) works with are so lucky, such an enjoyable fun evening.”

“Makes me want to begin planting!”

“High quality – which is always what you get from Janet (Macunovich).”

“Enjoyed class – I’m a novice – much to learn.”



THE NEED: **SERVING PEOPLE WITH SPECIAL CIRCUMSTANCES**

Expanded Financial Aid Opportunities

At MSU Tollgate, we pride ourselves on providing high quality programming led by experienced staff, backed by research, and implemented with best practices. We recognize that the cost associated with programs with such high standards can be difficult for some schools, community groups, families, or individuals to cover. In order to meet this need we have a new financial aid committee that works to raise and equitably distribute financial aid funds. The committee consists of volunteers, past program participants, community members, and staff. Together the group created a rubric for assessing financial aid applications, wrote a statement of purpose, and developed policies to guide the group's efforts in the future.

The financial aid committee's efforts are possible because of a generous \$5,000 donation from the Americana Foundation and revenue generated from our annual Pumpkinfest event. Without financial aid, groups like the Jerry L. White Center of Detroit Public Schools, who attended a Harvest Farm Ecology

program, could not afford to travel to the farm. This school serves teenagers with mild to severe cognitive disabilities in a high needs area of Detroit and many of them have never been to a farm. Our goal is to reach people of all backgrounds and communities. With our communit help, we hope to continue these efforts into 2018.

Thank you to the Americana Foundation for their generous support for experiential, place-based programming at MSU Tollgate.

- Assistance provided to 15 schools and 16 camper and Farm Sprouts families
- \$ 8,604 aid provided: \$ 5,362 to schools, \$ 2,444 to camper families, \$ 798 to Farm Sprouts families
- Communities impacted include Dearborn, Detroit, Farmington, Farmington Hills, Ferndale, Hazel Park, Southfield, Walled Lake

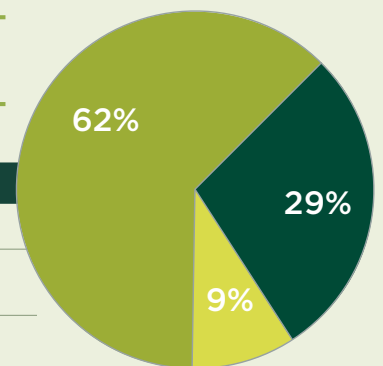
“Our students and staff are truly grateful for this wonderful experience at Tollgate. We look forward to our next trip to the farm in the spring!”
- Jerry L. White Center Staff and Students

“We really appreciated the scholarship support which reduced our costs and enabled our students to attend.”
- Hazel Park Elementary School Teacher

“The program at Tollgate addresses the needs of our students. Many of our students are in need of cultural experiences outside the classroom. Our students need the opportunity to make real world connections to the content they learn about in school.”
- Catherine Hamilton, Stevenson Elementary, Southfield



Reciever	Aid
Schools	\$5,362
Camper families	\$2,444
Farm Sprout families	\$798
Total	\$8,604



Friendship Circle Visits MSU Tollgate

MSU Extension strives to include people of all backgrounds and abilities. In July 2017, MSU Tollgate joined with Friendship Circle to host a group of 19 special needs high school students in experiencing the farm. Friendship Circle works throughout Michigan to provide people with special needs the friendship and support that they deserve.

Assisted by MSU Tollgate staff and 4-H volunteers, small groups rotated through activities including a wagon ride tour, goat milking, and engaging with chickens, rabbits, lambs, goat kids, and a calf. Students also visited with the horses, grooming, leading and riding! The smiles and feelings of accomplishment exhibited by students during their visit resulted in a heart-warming day for all involved.



THE NEED: --- ENDURING PARTNERS

MSU Gifted and Talented Education

The 2016-2017 academic year was the second year that the Cooperative Highly Accelerated Mathematics Program (CHAMP) and the Intensive Studies of Humanities, Art, Language and Literature (ISHALL) English program took place in Novi, MI. The Michigan State University Gifted and Talented Education (GATE) office administers both programs and MSU faculty teach the classes. MSU Tollgate provides access for students from a variety of school districts surrounding Novi the area.

The programs are both advanced and accelerated. Students enrolled in the program are currently in grades 7-9, but they are learning high school curriculum and earning high school credit. In two years, CHAMP and ISHALL students will complete all four years of high school math or English curriculum, studying the content that is required for Michigan high school graduation and meeting the Common Core National Standards.



GATE
GIFTED AND TALENTED EDUCATION

In their first year of CHAMP, students study Algebra 1 and Algebra 2. In the second year, CHAMP students study Geometry and a standard Pre-Calculus course (Trigonometry, Analytic Geometry, College Algebra, and a brief introduction to calculus concepts.)

- Fourteen students participated in the CHAMP Novi program in 2016-2017
- CHAMP students came from eight different school districts

In year one of the ISHALL program, students study grades 9 & 10 English curriculum. In year two of the program, students study grades 11 & 12 English curriculum.

- Nine students participated in the ISHALL Novi program in 2016 - 2017
- ISHALL students came from five different school districts

Additional program details can be found at:

CHAMP: <https://gifted.msu.edu/programs/academic-year-programs/champ>

ISHALL: <https://gifted.msu.edu/programs/academic-year-programs/ishall-english>

The Americana Foundation: 30 Years of Partnership

At MSU Tollgate programs, visitors have the opportunity to interact with livestock, make maple syrup, investigate macroinvertebrates, and so much more. Experiences like this are available to everyone because of the foresight and commitment shown by MSU Tollgate's founding partner, the Americana Foundation. In 1987, the Americana Foundation gifted a portion of the 160-acre property to Michigan State University. By doing this, the Foundation was achieving the vision of their founders, Adolf and Ginger Meyer, to provide opportunities for their community to learn about agriculture and the environment.

THE Americana Foundation

For 30 years, Michigan State University and the Americana Foundation have been working together to make this vision a reality. Michigan State University Extension uses its expertise in community education, agriculture, and natural resources to lead programming efforts on the site. These efforts are possible because of the Americana Foundation's commitment to a shared vision. In 2017 alone, the Americana Foundation provided \$147,500 in financial support for maintenance of facilities, a new tractor, and staffing costs. Thank you to the Americana Foundation for the past 30 years. Because of this strong partnership, we are able to build on the roots of our heritage to pave new ground for the future.



TOLLGATE CHILDREN'S GARDEN



Touch Us
Smell Us
Enjoy Us

MSU Extension Staff Located at MSU Tollgate

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