



# MSU TOLLGATE 2018 ANNUAL REPORT



**MICHIGAN STATE**  
UNIVERSITY | Extension





## 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.

*Dear Friends,*

Welcome to MSU Tollgate! We have experienced a wonderful 2018 full of new activities, expanded offerings, and an increased footprint in our local community. I hope as you read the 2018 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 community. 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*

Director - MSUE Tollgate Farm and Education Center

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# SUCCESS BY THE NUMBERS

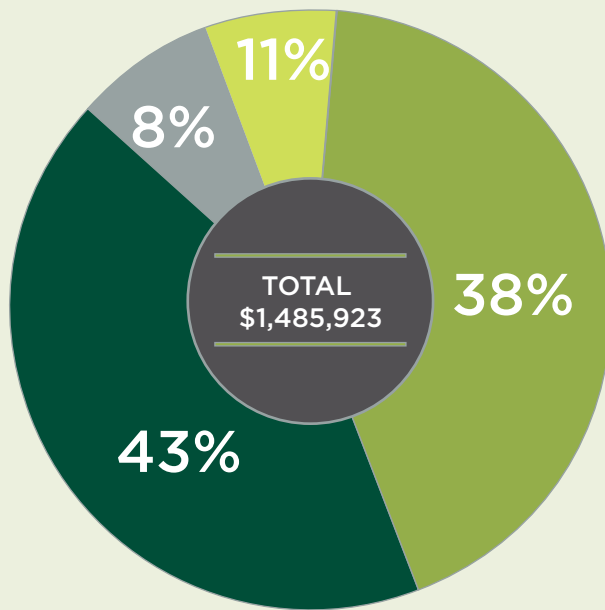
## Volunteering

Program	Number of Volunteers	Total Hours	Value
Teen Stewards	82	6800	\$167,892
Garden and Maple Sugaring	240	3860	\$95,303
4-H Club	55	2050	\$50,615
Pumpkinfest	153	1232	\$30,418
Sustainable Agriculture	4	200	\$4,938
Pancake Feast	23	140	\$3,457
Early Childhood	2	40	\$988
<b>Totals</b>	<b>559</b>	<b>14322</b>	<b>\$353,610</b>

## Visitation

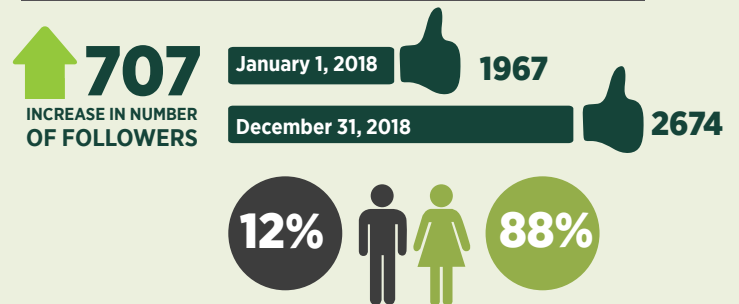
Initiative	Attendance
School Field Trips	6836
Conference Center Rentals	4528
Off-site Community Events	3000
Pumpkinfest	2350
Garden Volunteer Gatherings	1365
Early Childhood Education	760
Day Camps and Camp Stewards	644
Pancake Feast	448
Plant Sales and Garden Open House	625
Evenings in the Garden	363
Pumpkinfest/Pancake Feast Volunteers	296
Sustainable Agriculture Programs	250
Other Lectures, Tours, Events	469
<b>Total</b>	<b>21,934</b>

## 2018 MSU Tollgate Funding



## Social Media and Website Statistics

### FACEBOOK



### MSU TOLLGATE WEBSITE 2018



Initiative	Attendance
Earned Revenue	\$568,222
MSU Extension	\$641,825
Americana Foundation	\$119,100
Other Donations	\$156,776
<b>Total</b>	<b>\$1,485,923</b>



# MSU TOLLGATE GARDEN : VOLUNTEERS

An important feature of MSU Tollgate is its collection of beautiful teaching gardens. The horticulture gardens on the farm contain twenty separate gardens, each featuring a unique theme, such as roses, hostas, plants that grow well in dry conditions, a waterside garden, and many others. All of Tollgate's gardens are maintained and funded by a dedicated group of volunteers: The Tollgate Garden Volunteer organization. The MSU Extension Master Gardener program is an essential component of the

MSU Tollgate volunteer organization. Although it is not required that Tollgate volunteers be a graduate of the Master Gardener program, most of Tollgate's volunteers have received excellent training through this educational program.

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



## VOLUNTEER SPOTLIGHT - RENEE COTTRELL

Renee has been the president of the MSU Tollgate garden volunteer organization for many years. She brings a love of horticulture, an organized mind, and a caring personality to her role at MSU Tollgate. She manages monthly executive meetings as well as general membership meetings. Renee not only administers work in the gardens, she is willing to get her hands dirty as well. She establishes and tends many gardens on the site. Renee also uses her love and knowledge of horticulture to mentor other garden volunteers. The horticulture gardens at MSU Tollgate are a tremendous resource for all. They would not be the same without Renee's guidance.

 **559 VOLUNTEERS**  
AT TOLLGATE IN 2018







## MAPLE SYRUP PRODUCTION

One of the big differences between the maple syrup educational program at Tollgate and educational efforts at other facilities is that the Tollgate program starts with a syrup production facility. Rather than tapping a few trees as might be seen at some nature centers, visitors to MSU Tollgate get to see what a real production syrup operation looks like: 100's of trees tapped, tubing to collect the sap, a small commercial evaporator and a reverse osmosis machine.

The MSU Tollgate system boils down over 4000 gallons of sap each year to produce over 100 gallons of syrup. Visitors get to see the entire process as it happens.

The maple syrup project at MSU Tollgate is a cooperative effort between a dedicated group of volunteers and a devoted and enthusiastic educational staff. The volunteers work hard all year to repair lines, tap trees, collect sap, and run the evaporator. The production effort of the volunteers frees the educational staff to do what they do best: teach. Groups visiting the forty acre MSU Tollgate woods have the opportunity to experience a guided learning event led by facilitators who have significant knowledge of the syrup making process.



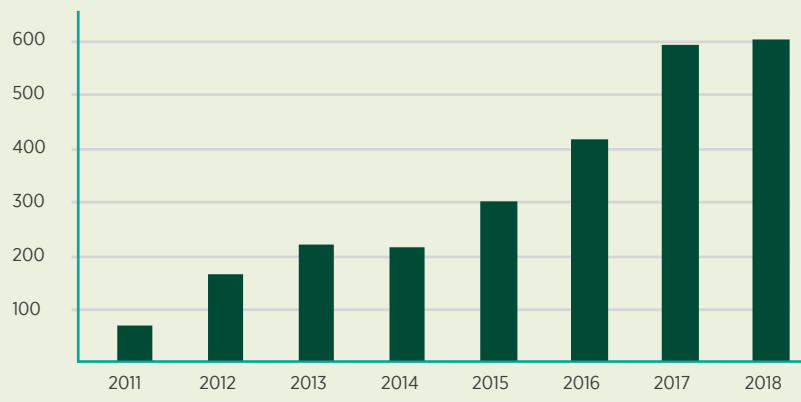
Most of MSU Tollgate's instructors have been teaching visitors the wonder of making maple syrup for several years. They excel at introducing visitors to the process and rich history of syrup production. In February and March, when not much else is happening in Michigan agricultural, it is a great time to head to the woods to see how one of Michigan's premier woodland products is made. Close to the people of SE Michigan, MSU Tollgate is a great place to experience maple syrup making at its best!





In 2018, MSU Tollgate Farm welcomed 609 summer camp participants. This included 82 teen volunteers, and 527 campers age 6 to 12. The program has seen significant growth over the years. The first year of camp in 2011 had 67 participants including teen volunteers. We are anticipating to have 624 camper slots available for the summer of 2019.

### SUMMER CAMP PARTICIPATION



# SUMMER CAMPS

Every day at MSU Tollgate Summer Camp is an exciting adventure with a different theme. A typical day includes making nutritious snacks in Garden Kitchen, caring for our farm animals, sowing seeds in the garden, engaging in a creative week-long STEM project, and investigating the natural world of field, forest, and pond. Camp takes place during a total of nine weeks of camp and thirteen week-long themed sessions. Themes for this year included Green Science Adventure, Survival, Winged Wonders, Eco-Warrior, Water, Bug, Horse, Food, and Animal Camps.







# SUMMER CAMPS AND STEWARDS



## TEEN LEADERS AT MSU TOLLGATE FARM CAMP

**80**

12-19 YEAR OLDS

**20-24**

TEEN HELPERS PER WEEK

**30**

30 YOUNG SERVING 3 OR MORE WEEKS

**8**

CAREER EXPLORATION AND PERSONAL DEVELOPMENT SESSIONS

Over 80 teens participated in MSU Tollgate's Stewards Program in 2018. These individuals serve on our education team as mentors for our young campers. Stewards and Stewards-in-Training share their own individual gifts, interests, and skills with the MSU Tollgate community in an engaging camp environment. Opportunities for personal growth and community service abound for these young

leaders as they soothe a hurt child, help campers cook, shoot archery, lead songs and games, forage for wild edibles, build fires, care for farm animals, and much more. Stewards and stewards-in-training help create a safe and inclusive learning place for campers in the farm's various habitats - forest, field, pond, and farmyard!



24 HOUR OVERNIGHT TRAINING WITH CAMPUS PRESENTERS



WEEKLY LEADERSHIP AND TEAM-BUILDING SESSIONS





# EARLY CHILDHOOD EDUCATION

The Farm Sprouts Preschool Program offers young children, ages 3-5 years old, with the opportunity to learn through meaningful experiences in the winter, spring, and fall. Each season, children's interests help guide the learning. The first-ever maple sugaring season provided young children with the opportunity to work alongside our maple sugaring volunteers, tapping sugar maple trees, watching the steam rise as the sap thickened to syrup, and tasting the sticky sweet product on pancakes they helped make from scratch through both the program and a special event, the Maple Sugaring Pre-K Soirée. In the spring, children observed bees collecting pollen and buzzing the hives, peeked inside at the frames, and worked as pretend beekeepers thanks to donations from our program families. Lastly, during the fall season, children's fascination with maps led them to investigate the migration of monarch butterflies as they wondered at the ways both people and animals navigate the world.

## PROGRAM NUMBERS

**Story Hour:**  
**342**

Parent and Children Visits

**Pre-K Soirée:**  
**158**

Adults and Children

## Farm Sprouts Children Participants:

**31**

Maple Sugaring Season

**62**

Spring Season

**53**

Fall Season



”

*“Before, he would definitely hang back and watch and then go into the group... Now I feel he's got more confident to be with kids and he seems to play really well with other kids.”*

”

*“This has totally built up her confidence in a lot of ways... She's just really comfortable with herself, with asking questions.”*

”

*“He's more likely to not wait for me to come out with him. He'll just go make it happen. Like, 'Mom are you up yet? Because I'm going outside.'”*

”

*“She's always had [an interest in nature], and I think it tapped into something she was interested in and had it not been for Farm Sprouts we wouldn't have been able to cultivate that interest as much.”*

”

*“My daughter now asks to cook at home with kale and other vegetables we would never have eaten before.””*



# SUSTAINABLE AGRICULTURE

## SUSTAINABLE AGRICULTURE APPRENTICESHIP

In its third year, the apprenticeship program saw two new apprentices spend the season at MSU Tollgate to immerse themselves in an intensive 22-week agricultural training program. Joined by a returning apprentice serving as the field manager, and managed by the sustainable agriculture instructor, Will Jaquinde, the apprentices learn through doing, taking on all aspects of the 3-acre vegetable production. The program also develops apprentices' conceptual and business skills through weekly readings, discussion and frequent tours of area farms and food businesses.

## COMMUNITY SUPPORTED AGRICULTURE PROGRAM

The community supported agriculture (CSA) program at MSU Tollgate flourished in its 6th year! 124 members invested in the farm before the beginning of the season and received a share of the production's bounty for 20 weeks during the growing season. Additionally, 55 members stayed on for the program's first ever Fall CSA, a 6-week program that extended the growing season to half of the year. CSA members, who also attend regular tours and potlucks, are central to our mission of promoting agricultural education through growing healthy food.

## BEGINNING FARM INCUBATOR

The incubator program's mission is to reduce some of the largest barriers to entering agriculture for beginning farmers. By providing access to land, infrastructure and machinery at a reasonable rate the incubator makes it possible for farmers to start their business without taking on significant debt, allowing the entrepreneur to develop their business and skills. The first 'incubatee' is from the first cohort of sustainable agriculture apprentices, Gwen Schaller. Root to Rise Farm was able to realize a profit in its first season of operation by selling at farmers markets and developing a local workplace CSA with the assistance of MSU Extension. Root to Rise will return to incubate on site in 2019, taking on more land to grow the business!





# SCHOOL TO FARM FIELD TRIPS

MSU Tollgate Farm continues to partner with local schools to provide students with innovative experiential science learning. Recently, MSU Tollgate staff worked closely with area schools to customize several new inquiry-based programs to inspire deep connections to the farm and the natural world.

MSU Tollgate's programs are designed to inspire learning and to align with the new Michigan Science Standards. Built on the national Next Generation Science Standards, they emphasize not only what students are to know about science, but also what they are able to do with science.

Tollgate programs incorporate science and engineering practices that students should be able to demonstrate at sequential stages in their K-12 education. One important emphasis is on integrating science content with application. By presenting students with real world challenges and guiding them through awareness, understanding, and action, children investigate phenomena, record and analyze data, make models, and draw inferences through their explorations in the natural world.



*"The feedback I received was nothing short of stunning. We are incredibly grateful for the hard work of the talented staff at Tollgate."*

- RJ Webber, Assistant Superintendent for Academic Services, Novi Community Schools

Visits to MSU Tollgate foster these outcomes and bridge multiple disciplines using crosscutting concepts. Students are allowed to connect their farm experience with different aspects of their classroom learning and to deepen their understanding of core ideas observed in the farm environment. Newly piloted Tollgate programs include the special Trees, Trees, Trees designed in collaboration with Novi school leaders and teachers for twenty-two kindergarten classes. Other new programs include Water and Land; Ecosystems Explorations; and Weather and Animal Adaptations which were crafted in partnership with Lanigan Elementary School.

As MSU Tollgate Education Staff continue to collaborate with school leaders and teachers to develop innovative programming, we are privileged to witness the discovery learning taking place through the wide eyes of our young visitors.



*"My class loved the watershed activity and couldn't stop talking about the connections they made during that activity."*

- Angelina Lowe, 2nd grade teacher, Lanigan Elementary







## REFUGEE GROUP

A group of recent Syrian and Iraqi refugee families had a focused visit to MSU Tollgate in May. We took to the woods to learn about maple sugaring and then toured the animal barns for questions and answers about the Toggenburg kid goats and the chicks and chickens. We follow this up with a fun potluck lunch in MSU Tollgate's historic barn.

## FINANCIAL AID

### FINANCIAL AID COMMITTEE MEMBERS INCLUDE

Kurt Westermann  
Susan Walters-Klenke

Kathy Zhong  
Patrice Johnson

### 2018 TOLLGATE FINANCIAL AID GIVING

Program	Amount
School Field Trips	\$8,018
Camps	\$1,010
Farm Sprouts	\$1,269
Adult Programs	\$130
<b>Total</b>	<b>\$10,427*</b>

\*The Americana Foundation contributed \$5,000, our Giving Tuesday Campaign contributed \$2,770, and Pumpkinfest contributed \$2,700.

The team at MSU Tollgate Farm is committed to providing affordable opportunities to our many program participants. This is made possible because of the generous support of the Americana Foundation, individual donors, and attendees of our annual Pumpkinfest. A core group of volunteers give their personal time to support a Financial Aid committee to lead the distribution of financial aid. The committee develops standards for disbursing aid and determines the amount of aid per application. Thank you to our committee members!

**THE  
Americana  
Foundation**

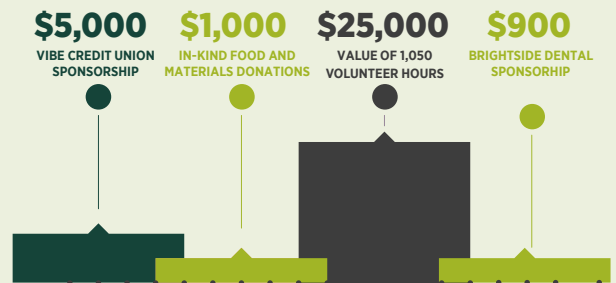
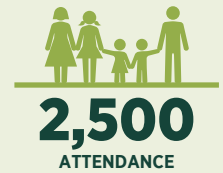






## MSU TOLLGATE FARM PUMPKINFEST

At MSU's Tollgate Farm Pumpinfect, the pumpkin is front and center. Educational and enjoyable, Pumpkinfest 2018 drew over 2,500 adults and children despite a rainy weekend. Many of these hardy individuals 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, 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 who otherwise are unable to attend MSU Tollgate programs throughout the year.



**Bright Side Dental & Orthodontics<sup>SM</sup>**

## MAPLE TAPPING AND PANCAKE FEAST

A visit to the 2018 MSU Tollgate Maple Tapping and Pancake Feast began with warm pancakes topped with delicious MSU Tollgate maple syrup. After filling up, visitors ventured 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.





# TOLLGATE FARM TO TABLE DINNER



On August 25th of 2018, one hundred and twenty-five guests enjoyed the first Tollgate Farm to Table Dinner. The evening centered around four guests chefs who volunteered their time to support the farm. These individuals included Alan Mehar of Compass Group Detroit, Jay Gundy of Red Dunn Kitchen, Chris Johnson of Meeting House, and the lead chef, Jeff Rose of CAYA Smokehouse and Grill. Each one of the chefs prepared a passed appetizer and one of the four dinner courses. Taste the Local Difference considered the event a “Certified Local Event” because over 90% of the ingredients for the dinner were sourced from Tollgate or within 50-miles of Tollgate. At the dinner the guests had the opportunity to tour the farm and learn about the many ways that they can support local farmers. Additionally, Drafting Table Brewing Company and Sandhill Crane Vineyards showed their support for our efforts by sponsoring the event. The dinner raised over \$5,000 that has gone to funding an Americorp volunteer to lead low-cost 4-H Special Interest Club programming.

Jeff Rose, Michigan State University alumnus and CAYA Smokehouse Grill executive chef, was the lead chef at the Farm to Table Dinner.





# 4-H CLUB

The accomplishments of the youth members of Tollgate Farm 4-H Club are a reflection of the hands-on opportunities available at Tollgate Farm, through 4-H. With membership at 45 youth, Tollgate Farm 4-H Club reflects the growing presence of 4-H at Tollgate Farm. These

-  Completing over 1400 hours of volunteer work at the farm, maintaining a vegetable garden, caring for livestock and poultry, participating in public events, such as Pancake Feast and Pumpkin Fest, at Tollgate Farm.
-  Gathering seed packets from seed companies for distribution to over 40 school and community gardens
-  Participation in workshops covering sheep & goat showmanship, horse care, vet science, beef/sheep/ swine & sewing
-  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 - for the second year in a row.

Tollgate Farm 4-H Club sell vegetables, grown at the farm to support activities. The Club also produces products including goat milk soap, granola, eggs and fruit leather. Activities build knowledge and life skills - team work, problem solving, goal setting and more!

kids participate in activities in Plant Science, Animal Science, Business and more. The results of these activities provides products for farm stand sales, funding further activities of the club. Some notable achievements include:

**2**

**MEMBERS RECEIVED GRAND CHAMPION AND RESERVE GRAND CHAMPION - DAIRY GOAT RIBBONS FROM THE OAKLAND COUNTY FAIR.**

**4**

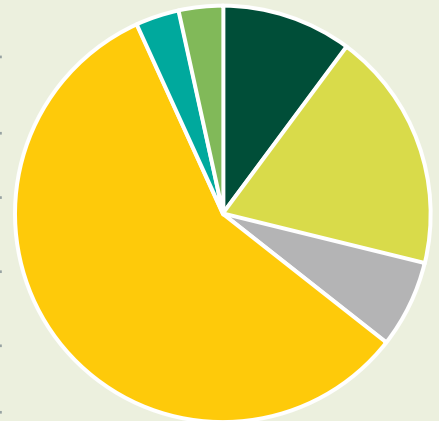
**YOUTH TAKING LIVESTOCK PROJECTS TO THE OAKLAND COUNTY FAIR (GOAT, SHEEP) AND 6 YOUTH TAKING LIVE STOCK TO THE MICHIGAN STATE FAIR (GOAT)**

**8**

**YOUTH RECEIVED URBAN FARMING SCHOLARSHIPS THROUGH THE MICHIGAN STATE FAIR**

## TOLLGATE ANIMALS

	Goats	6
	Sheep	11
	Horses	4
	Chickens	34
	Rabbits	2
	Ducks	2







## SAKURA GARDEN GRAND OPENING

"Hanami" is the centuries-old Japanese practice of picnicking under a blooming Sakura cherry tree. In September, MSU Tollgate celebrated an addition to its gardens. In a cooperative project between Michigan State University, Oakland County, the City of Novi, the State of Michigan and Michigan's Japanese business community, a new ornamental cherry orchard was established. Dignitaries, including Novi mayor, Bob Gatt, MSU Extension Director, Jeff Dwyer, Oakland County Executive, L. Brooks Patterson, and Michigan Governor, Rick Snyder all helped to make the day special. The Planting includes seventeen ornamental Japanese cherry trees and a Japanese themed structure and trellis. MSU Tollgate looks forward to many future celebrations of the spring cherry blossom season.

From left: Robert Gatt, Mayor of Novi; L. Brooks Patterson, Oakland County Executive; Taizo Mikazuki, Governor, Shiga Prefecture, Japan; Rick Snyder, Governor, State of Michigan; Dr. Jeff Dwyer, Director, Michigan State University Extension; and Mitsuhiro Wada, Consul General of Japan. Photo by Vaughn Gurganian.

## SAKURA GARDEN DONORS

- Daifuku North America Holding Company
- Deloitte & Touche LLP
- Hitachi Automotive Systems Americas, Inc
- KIP America
- L. Brooks Patterson
- NGK Sparkplugs, Inc.
- NHK International
- Nissan Technical Center, North America
- 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





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