The GVSU Sustainable Agriculture Project's Annual Report

July 1, 2019 – June 30, 2020





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Message from the Advisory Council

Dear friends and colleagues,

We are delighted to present our Fiscal Year 2020 Annual Report.

This year, the SAP hosted a wide variety of classes, programs, and events including the Growing Diversity Initiative beginning in August 2019. This brought together a team with a diverse set of experiences working together to learn about the farm, explore religious diversity on campus, eat together, share examples of using the farm as an experiential classroom, discuss examples of engaged pedagogies teaching religious diversity, and take time to learn about each person's work and goals. The SAP also hosted the Growing Connections Food Summit in January 2020. This event drew 120+ participants including students, faculty, staff, and community members to discuss and share visions of a healthy food system.

The SAP was updated with a paved driveway which allows for ADA access, plus a gravel lot to help alleviate the parking along Luce Street as the number of visitors continues to increase. Gravel walkways provide better and drier access throughout the farm. The SAP also received a solar-powered welcome kiosk which charges an electrical bicycle used to pull the mobile market.

We look forward to building on this success as we hope to reach a tipping point in the SAP's history. As we continue to generate increasingly more internal and external support, we will be working to advocate for the applied learning that students from across all disciplines experience at the SAP. To accomplish this goal in a thoughtful and intentional way, we will work to develop a ten-year Master Plan for the SAP, keeping our many stakeholders at the forefront of this conversation.

We hope you'll join us as we embark on another year of seeding sustainable food practices, cultivating leadership and learning, nurturing place, and growing community.

With gratitude,

The Sustainable Agriculture Project Advisory Council

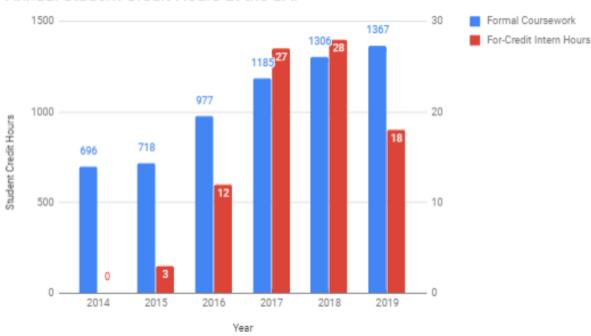
Amanda Buday, Brett Colley, Youssef Darwich, Karen Gipson, Yumiko Jakobcic, Sarah King, George Lundskow, Kelly Parker, Margaux Sellnau, Steve Snell, and Jennifer Winther

Executive Summary

This year, we have worked to increase educational opportunities for students, campus-wide, about sustainable food system practices and to improve the practices already in place at the SAP. We have done this by:

- o Hosting the Growing Diversity Initiative and the Growing Connections Food Summit
- Reaching out to students in new and creative ways to raise awareness about the Sustainable Agriculture Project through events like a 3x3 basketball tournament and a plant potting event with Student Senate
- Expanding our internship offerings and working with students to develop internships that support their learning objectives
- o Investing in improved accessibility at the Luce Street site

Annual Student Credit Hours at the SAP



Strategic Visions

1. Seeding Sustainable Food Practices

The Growing Diversity Initiative brought together a team with a diverse set of experience working together to learn about the farm, explore religious diversity on campus, eat together, share examples of using the farm as an experiential classroom, discuss examples of engaged pedagogies teaching religious diversity, and take time to learn about each person's work and goals.

2. Cultivating Leadership

This year, we worked diligently to improve the development of the Feenstra Endowed Fund which supports a lead intern with an additional stipend. This fund is currently at approximately \$11,000 of the needed \$30,000.

We have worked to improve structures to formally record, assess, and report current levels of leadership and learning. We have developed a database of past student testimonials and we post these testimonials creatively on the SAP website. We have also worked to highlight the projects of interns, students, and faculty on the SAP website. We have supported the Office of Sustainability Practices blog by encouraging students to regularly write and submit posts.

We also worked to further the development of student ideas by reviewing the proposals that students develop as class projects.

3. Nurturing Place

This year, we worked to develop the pollinator habitat at the Luce Street farm site, as well as an urban farm site in Grand Rapids.

We also held the Global Grove tree planting event in partnership with the International Students' Association during Sustainability Week. Volunteers planted new fruit trees including plum, peach, apple, pear, and cherry.

4. Growing Community

This year, we made great strides at improving the public presence and recognition of the SAP, to improve the student sense of connection to the SAP during the winter, and to increase community outreach efforts of the SAP.

The Growing Connections Food Summit brought together 120+ participants including students, faculty, staff, and community members to discuss and share visions of a healthy food system.

Academics

1. Formal Coursework

As the SAP continues to grow, it remains a model experiential learning site that demonstrates innovative teaching and learning across the disciplines. The following classes have participated in site-visits or field trips, impacting 1,370 student credit hours:

- ANT 340 Culture and Environment: This course met at the SAP to discuss the relationship humans have with environmental and agricultural systems for a resilient culture
- ANT 495 Capstone: Students met at the SAP to discuss the dynamic influences of agriculture on society, historically through modern day
- BIO 319 Global Agricultural Sustainability: Students in this course met at the SAP regularly to manage experimental plots comparing the effects of Milorganite, traditional compost, and unamended soils on plant growth and productivity
- CD 693 Masters Project: These clinical dietetics students toured the SAP to discuss the relationship between healthy agriculture and our health care system
- ENS 201 Introduction to Environmental Studies: Multiple sections of this course toured the farm or participated in a guest lecture to discuss how the triple bottom line of sustainability (people, planet, profit) relate to agriculture
- ENS 311 To Bee or Not to Bee: Honey Bees and Social Impact: Students in this class visited the SAP several times to inspect and learn about the beehives at GVSU
- ENS 392 Sustainable Agriculture Ideas and Techniques: Students in this course meet regularly at the SAP where they plan and manage their own garden plots, coordinate various farm tasks such as building season extension structures, design and install drip irrigation, and develop their own projects to enhance the capacity of the SAP
- ENS 401 Environmental Problem Solving: Students in this course met at the SAP and with the SAP Leadership Team throughout the winter, spring, and fall semesters to practice problem-solving techniques in relationship to the work of the SAP
- HNR 280 Food for Thought: Students in this course visited the SAP for a tour and discussion on farming and how it relates to all areas of academic study and community development. Students also planted seeds, transplanted, and tapped maple trees with the SAP Farm Manager and Educator
- o HTM 201: Good Food Gone Bad: Food Safety for Everyone: Students in this course visited the SAP to discuss the application of food safety techniques on a farm setting
- o IDS 183 Sustainability as a Lifestyle: Students in this course visited the SAP for a tour and discussion on sustainable food systems
- LIB 342 Food Matters: Students in this course participated in a guest lecture discussing the impacts of the transition to an agricultural society
- NRM 330 Environmental Pollution: Students in this course used the SAP to collect precipitation data, in addition to discussing the role of agriculture in environmental pollution

- o REL 100 Religions of the World: Students in this course explored the interrelationship between a culture's religion and its agriculture practices
- WGS 335 Women, Health, and Environment: Students in this course visited the SAP for a tour and discussion on the intersections between health and agriculture, and the changing role of women in agriculture through the contemporary food movement. They visited with WISEWOMEN Centers for Disease Control Program which supports women gardeners through community partnerships

2. Class Projects

- Welcome Kiosk and Stand Operating Procedures Manual: ENS 401 students emphasized the importance of volunteers at the SAP and further developed plans for a kiosk and a report that included specific recommendations for developing standard operating procedures
- Irrigation and Storm Water Management: ENS 401 students analyzed the SAP's irrigation system and made recommendations to improve usability, including surface water management
- SAP Apprentice Program: ENS 401 students developed a multi-year training program
 with the SAP including mechanisms for student to student training to improve the
 continuity of education
- Plant-Based Health: ENS 401 students aimed to develop healthier eating habits for GVSU students by connecting with the SAP
- o Pollination Project: ENS 401 students targeted the development of the SAP's on-site pollinator habitat and educational programming associated with the habitat
- Chickens: ENS 401 students focused on the feasibility of incorporating chickens into the Luce Street farm site
- Composting Improvements: ENS 401 students focused on designing improvements to the onsite composting system, including ways to integrate community outreach
- Advertising: ENS 401 students worked on improving, expanding, and better targeting the advertising capabilities of the SAP
- Water Drainage: ENS 392 students aimed to improve the drainage adjacent to the northern class plots
- Composting Improvements: ENS 392 students focused on ways to improve composting at the SAP
- Soil Testing: ENS 392 students focused on developing soil testing possibilities and procedures at the SAP

3. Research

O Hive Monitoring Initiative and Mite Checks: Dr. Jon Englesma, faculty in Computer Information Systems, is developing the software systems that the Bee Informed Partnership utilizes in its Hive Monitoring Initiative. Dr. Englesma's team is running electronic hive monitors at the SAP Apiary that contribute data to the BIP Hive Monitoring and Mite Check programs. This research is part of a four-year study funded by the U.S. Department of Agriculture

- Willow Biomass: Dr. Erik Nordman, faculty in Natural Resource Management, planted a
 willow biomass plot at the SAP in 2016. Now having completed the final year of the
 growth cycle, the weight of willows was recorded and assessed for feasibility in
 renewable energy production
- Drought Tolerance of Underutilized Crops: Leann Tasma and her advisor, Dr. Sheila Blackman, were awarded the SAP Place-Based Research grant for a caterpillar tunnel and supplies to study the effects of drought on underutilized crops to determine their feasibility as alternatives for commodity crops

4. Educational Workshops

- Cheese Making: The Farm Club hosted this workshop to explore the background and methods of traditional and vegan cheese-making
- o Sauerkraut: A SAP intern hosted and taught peers about fermentation and sauerkraut
- Salve Making: The Farm Club hosted a DIY workshop to make salves from farm-fresh ingredients
- o Foraging: A SAP intern led participants in foraging for edible mushrooms, wild greens, and native fruits

5. Special Projects

- Pressed Flowers: Farm Club students gathered flowers from the SAP and pressed them into artwork
- o Mobile Market: Consumers Energy solar garden educational funds were awarded to the SAP to build a solar powered kiosk to charge an electric bike to pull the Mobile Market



Student Leadership

Students are the foundation of the work at the SAP. This year's interns represent thirteen different majors and diverse interests in issues related to food and agriculture.

- 1. Dave Feenstra Lead Intern: One student each year is selected to lead the Farm Crew and is funded through the Dave Feenstra SAP Leadership Fund.
 - o Margaux Sellnau:
 - Margaux served as the Feenstra Intern for 2019-2020. She is an Environmental and Sustainability Studies major and has taken initiative on all aspects of the farm. She has especially developed a love for flowers, expanding the SAP's cut flower production and arrangement services. She hopes to have her own flower farm one day.



Michael Hinkle: Michael served as the Feenstra Intern for 2018-2019. He is a Natural Resource Management major with a passion for agriculture that goes back to childhood. Michael hopes to use talents and ideas learned at the SAP to eventually operate an agrotourism farm in Michigan.



- 2. Farm Crew: The Farm Crew manages the day-to-day operations of the farm, helping to share the farm as a laboratory for others to learn from and use.
 - Leann Tasma: Leann is a Biology major and is also completing the Sustainable Food Systems Certificate. In addition to her research project, Leann was the SAP's primary plant propagator, focused on everything related to seeds. Leann is always eager to learn and was encouraged to learn about the resilience of young seedlings.



 Bailey Glazier: Bailey is a senior studying geography. A resident in the farm house, he is deeply curious about all aspects of the farm, particularly how it has inspired students to become more sustainable.



 Hanna Nordbeck: Hanna is a Biology major and works at the SAP's greenhouse specialist. She was also the Community Garden Manager this year and is also interested in working with trees.



 David Siroonian: David is a Natural Resource Management major and serves as the tomato infrastructure specialist. Always smiling, David has a variety of interests and is working to better identify his future career trajectory which may include having a farm of his own.



 Tim Durden: Tim is a Spanish major and serves as the SAP's hospitality specialist. He intends to work with Spanish speaking agriculture workers and as a teacher.



- 3. For-Credit Interns: These students design and develop internships to support the requirements of their individual majors.
 - Tyler Martin: Tyler is an Anthropology major and spent the summer working on many aspects of the farm. He was instrumental in updated the SAP's online store. Tyler hopes to have his own homestead in the future.



 Nick Keller: Nick is an Environmental and Sustainability Studies major and spent his summer implementing a compost project originally from his ENS capstone class.



 Angela Haan: Angela is an Anthropology major and focuses on the relationships between culture and environment. Along with assisting around the farm, she also helped to run the SAP's Farmer's Market stand.



 Julia Majewski is a Nursing major. As an aspiring health care professional, Julia takes to heart that food is medicine. Julia took charge of harvest duties around the farm and has earned the honorary title of "Okra Ambassador."



- 4. Volunteers: The SAP hosts weekly volunteers throughout the year. During volunteer hours, students are exposed to a variety of farm tasks including bed preparation, planting, collecting seeds, building infrastructure, cutting flowers, moving compost, and more. In additional to offering open volunteer hours, the SAP provides group volunteer activities. The following groups and organizations got their hands dirty this year:
 - o Padnos International Center
 - Community Service Learning Center
 - o Rotary Club
 - o Society for Human Resource Management
 - Alternative Breaks

2019 GVSU Volunteers	Number of Volunteers	Number of Hours
Individual	185	463
Group	136	408
Total	421	870

5. Student Organizations

- o Farm Club
- o Beekeepers Club
- o Student Environmental Coalition
- o Chinese Culture Club
- o Rotary Club

6. Community Garden: The SAP originally started as a community garden, which remains a core component of the SAP's culture. The community garden provides a space for students to explore their skills and interests independently, but with support available as needed. In 2019, all 24 community garden plots sold out, prompting a successful funding request from Student Senate to expand the garden to 40 plots in 2020.



Outreach and Events

The SAP organizes, hosts, and participates in a variety of events throughout the year:

- O Growing Diversity Initiative: This initiative brought together a team with a diverse set of experience working together to learn about the farm, explore religious diversity on campus, eat together, share examples of using the farm as an experiential classroom, discuss examples of engaged pedagogies teaching religious diversity, and take time to learn about each person's work and goals.
- o Harvest Party: The fifth annual Harvest Party honored the 10th Anniversary of the SAP. The community celebrated the harvest through a shared meal, games, and music.
- Make a Difference Day: The SAP hosted volunteer groups in both the fall and winter.
 Students contributed to a variety of standard farm activities including planting, mulching, and replacing hoophouse plastic.
- o Global Grove: This event is hosted by the Padnos International Center and celebrates international partnerships and students by planting fruit trees.
- o Making Waves: The SAP's Farm Manager and Educator gave a presentation during the Big Splash week, discussing the role of agriculture in a healthy watershed.
- o Campus Life Night: The SAP participates in this annual event hosted by Student Life, generating interest and brightening the student experience by passing out flowers.
- o RA Orientation: The SAP's Farm Manager and Educator gave a presentation to share opportunities for students to get involved at the farm.
- Wellness Summit: This event is designed to increase awareness of campus wellness programs and resources, and share GVSU's strategies toward becoming the healthiest campus in the nation. The SAP hosted an informational table and provided fresh produce.
- MLK Upcycling and Crafting Workshop: The SAP led a seed bomb workshop as part of
 this event which is a collaborative effort between the Office of Sustainability Practices,
 the Office of Integrative Learning and Advising, and the Women, Gender, and Sexuality
 Studies department.
- Growing Connections Food Summit: This event brought together 120+ participants including students, faculty, staff, and community members to discuss and share visions of a healthy food system.



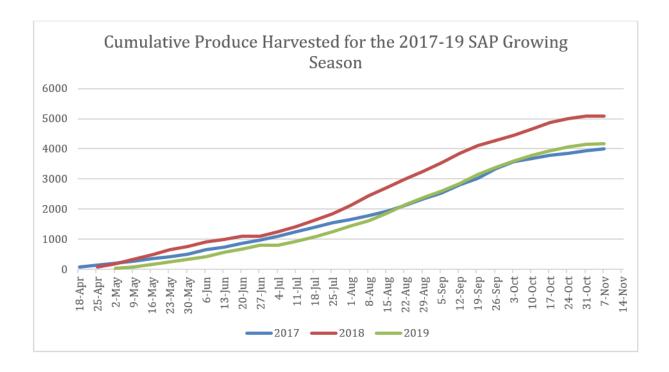
Community Engagement

When feasible, the SAP supports community efforts pertaining to sustainable agriculture and the local food system. This year, the SAP participated in:

- o Holland Middle School Geothermal Greenhouse
- o Energizing Our World

Farm Production and Improvements

This year, the SAP's vegetable production was a bit reduced as a result of the weather, but it enjoyed a productive season overall, growing both produce and student learning opportunities. Produce was shared through the SAP's Farm Share program, the GVSU Farmer's Market, Campus Dining, and Replenish.



This year, the Office of Sustainability Practices and the Brooks College Dean's Office helped to improve accessibility at the SAP by funding a cement driveway, a gravel parking lot addition, and gravel walkways. The driveway allows for a designated ADA parking space. The overflow lot helps to reduce the number of cars parked along Luce Street. The gravel walkways make the farm more accessible, particularly during the spring.





Student Testimonials

Melona Markham (Grant Intern)

"This summer, I interned at the SAP. I spent most of my time conducting routine farm work and working on special projects including grant writing and searching for new funding opportunities.

I chose the SAP for a few reasons. I had a positive experience volunteering for the farm briefly during semesters fall 2017 and winter 2018. The farm provides a calming and reflective atmosphere, a convenient location, and most importantly, it offers valuable lifelong skills. The ability to properly identify, grow, and harvest produce is useful in nearly any circumstance.

On the farming side, I gained a lot of new information about identifying plants and their diseases, and improving harvesting, planting, and weeding techniques to avoid motion waste. On the academic side, I learned about the Content Management System the SAP uses to keep the website up to date. As a result, I was responsible for updating the online store's inventory after the Farmer's Market on Wednesdays.

These empowering experiences gave me confidence in growing my own food. I now know it is possible and doable."

Noah Lamboley (Farm Infrastructure Intern)

"My experience at the farm so far this summer has been great and filled with an abundance of information and knowledge in which Youssef passes down to us interns as we're working on the farm and even off the farm. I've had the opportunity to engage in almost every process involved in farming from planting, selling, harvesting, preparing seeds for germination in trays, preparing beds and clearing plots of land to till up and then plant. Learning and innovation never stop with sustainable farming. However, I do feel I have learned an incredible amount and gained serious insight into what it takes to run and maintain a small-scale farm.

I would recommend to anyone interested in small-scale farming, health-conscious eating, and local support to gain an experience like this either with the Sustainable Agriculture Project or with another similar operation. This is a great opportunity to get your hands back in the dirt and not only connect with Earth but work in harmony with nature to grown clean, organic food. The work you put in is very rewarding especially knowing that the plants are growing well and producing because of the effort you put in to keep them healthy. It also feels good working with people who are just as interested in the small-scale farming process and it gives a sense of comradery when working together towards a similar goal.

What's next for me is still quite unpredictable. I have three more classes to accomplish this Fall semester before graduating in December. I suppose right now I am focusing on finishing school then I would like to possibly move in with some of my friends, grab a fun job for a while and make some money before looking at land worth possibly purchasing. At that point I would be looking to potentially kickstart a career in small-scale, sustainable farming. In this buffer time I would like to continue to read and understand techniques that allow small-scale farms to survive. Youssef has provided a bunch of this kind of information and keeps me updated with seminars that are going on around the country as well. I have a lot to indulge myself in yet before things start coming together but I am much better equipped thanks to my time at the SAP."



Featured Alumnus



Dana Eardley graduated from GVSU in 2016. She received her Bachelor of Science degree in Interdisciplinary Studies with emphases in Food Systems and Nonprofit Administration. She was an intern at the Sustainable Agriculture Project, a member of the Frederik Meijer Honors College, and the Cook Leadership Academy. She also participated in the "Semester in Detroit" experiential learning program.

Dana now serves as the Executive Director for the Fulton Street Farmer's Market. She is proud to work for an organization that centers its mission on supporting farmers and increasing food access.

Prior to the market, Dana worked with Baxter Community Center's raised garden bed program, Access' Farm to Pantry program, Local First's "Eat Local" campaign, and was given the immense privilege of interning at D-Town Farms with the Detroit Black Community Food Security Network.

Looking Forward

The COVID-19 pandemic has brought significant changes and limitations to activities at the SAP. Although the 2019-2020 fiscal year is ending in a time of unknowns, it is our hope that the SAP continues to serve students as a place to grow experience in their respective fields. In the meantime, the SAP is shifting gears to support its community in a time of need by donating its produce to local food resources.

