The GVSU Sustainable Agriculture Project's *Draft* Annual Report

July 1, 2020 – June 30, 2021





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Message from the Advisory Council

Dear friends and colleagues,

This year was unprecedented. In the midst of a global pandemic, the SAP became quiet and, for a period of time, did not host any students. And yet, it became a beacon of hope by providing produce to people in need, solidifying community partnerships, and – eventually – becoming a place where students could experience some sliver of "normal life" by being outdoors with friends and planting seeds for the future.

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, Karen Gipson, Michael Hinkle, Yumiko Jakobcic, Sarah King, George Lundskow, Kelly Parker, Margaux Sellnau, Steve Snell, and Jennifer Winther

Executive Summary

This year, the SAP intended to continue growing opportunities for experiential learning and engagement. While the pandemic limited some activities, the SAP was still able to:

- o Donate over 500 pounds of produce to support communities impacted by COVID-19
- o Formalize a partnership with New City Neighbors whose mission is "empowering youth to reach their full potential"
- o Welcome Michael Hinkle, the SAP's new Farm Manager & Educator
- o Begin welcoming students back and re-engaging them in internships



Strategic Visions

1. Seeding Sustainable Food Practices

The SAP, like most campus departments, was subjected to extraordinary circumstances with the COVID-19 pandemic and the stay-at-home orders. Despite limitations to student involvement, the SAP grew five hundred pounds of produce for donation to local food banks. In addition, the SAP was used as a space for education for high school students enrolled in the TRIO upward bound and New City Neighbors programs.

2. Cultivating Leadership

This year, we continued to focus on the development of the Feenstra Endowed Fund which supports a "lead intern" with an additional stipend. This fund is currently at approximately \$25,000 of the needed \$30,000.

3. Nurturing Place

The SAP submitted a white paper to university administration in hopes of building a multipurpose, ADA accessible facility that can provide innovative classroom space, a kitchen, and a restroom. The proposed facility will allow for wider engagement across campus. Without a building, all class visits and events require a back-up plan in case of inclement weather. This added challenge has deterred some people from utilizing the space. The need for basic teaching tools (internet, desks, and a projector) has also posed a challenge for faculty members who would otherwise be eager to engage at the SAP.

4. Growing Community

The SAP has also worked to connect high school students to a pathway to postsecondary education through a new community partnership with the Grand Rapids non-profit organization New City Neighbors. The Farm Club joined the SAP and New City Neighbors staff to install a high-tunnel on the farm. Produce grown in that space will feed those in need. Throughout the year, SAP interns worked directly with New City Neighbors at both locations. Interns also reached out to the community when conducting their summer projects. This year's compost intern worked directly with Wormies, a vermicomposting company, to help design a composting system for the SAP. One of the many food security interns also worked with both New City Neighbors, and briefly with the Urban League of West Michigan.

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 engaged with the SAP this past year (please note that this list is shorter than usual as a result of the pandemic):

- o 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.
- o ENS 311 To Bee or Not to Bee: Honey Bees and Social Impact: Students in this class worked with the SAP several times to inspect and learn about the beehives at GVSU.
- o 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.

2. Class Projects

- Affordable on-site housing: ENS 401 students designed affordable housing for GVSU students using recycled shipping containers. Each container served as a one to two bed facility, with a focus on sustainable living. Features included solar panels for energy efficiency, high efficiency appliances, and green insulation.
- Increased accessibility to students located downtown: ENS 401 students designed a
 downtown garden space to increase the SAP exposure and availability to students based
 out of the downtown campus. Features included a community garden and potential space
 for a greenhouse for winter production.
- Biodiversity initiative: ENS 401 students created a plan to increase biodiversity at the SAP to create more valuable ecosystem services. Initiatives included increasing water retention and reducing run-off, increasing quantity of pest controlling predator species, and improving the resiliency of the local ecosystem.
- Native pollinator initiative: ENS 401 students created a plan for a garden space to attract native pollinators and increase native pollinator education efforts. Their plan included the designing of a space for native wildflowers, a management plan for said garden space, and the implementation of an educational space including posters, pop-ups, and pamphlets relating the space to native pollinators and their provided benefits.

3. Research

 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

4. Educational Workshops

 Fermenting and Bread Making: The Farm Manager & Educator taught alumni how to use excess garden vegetables in home pickling and for the basics of fermented bread.
 Participants received a tea towel, wide-mouth jar, measuring spoons and recipe cards to make focaccia bread.

5. Special Projects

- This year, the Farm Manager & Educator led a gardening class as part of the TRIO Upward Bound Program.
- o A hops garden was added to serve as a resource for CMB 350, foundations of brewing, and for a potential advanced brewing class.



Student Leadership

Students are the foundation of the work at the SAP. This year's interns represent five 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.



Hayley Blair: Hayley served as the Feenstra Intern for 2020-2021. A Biology major, Hayley has a variety of interests, including conservation biology and world service. She used her time at the SAP to learn more about working with volunteers and to build up her leadership skills in hopes of becoming an ideal candidate for the Peace Corps following graduation.

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.



Harold Thommen: Harold is an Education major. Harold had extensive knowledge in sustainable agriculture before coming to the SAP, but was looking to learn more about the field and how he could implement it in the classroom. While at the SAP, he developed a lesson plan that uses the advancements of agriculture – and in particular sustainable agriculture – to teach history.



Andrew Vickery: Andrew is a Studio Art major. Andrew started volunteering at the SAP with an interest in learning more practical skill, in hopes of homesteading after graduation. After being hired as farm crew, Andrew spent his time beautifying the SAP, designing or restoring signage, and helping streamline the community garden space. Andrew also explored what it would mean to use the SAP as an exhibition space, with hopes of having a fall and spring showcase next year.



Jake Torok: Jake is a Natural Resources Management major and Environmental and Sustainability Studies and Biology minor. Jake is interested in implementing sustainability practices in his life, and pursuing methods of increasing sustainability efforts across campus. While at the SAP, Jake was particularly interested in soil health and how regenerative practices increase soil health. Jake worked frequently with volunteer groups, with a positive can-do attitude and pension for good conversation.

- 3. For-Credit Interns: These students design and develop internships to support the requirements of their individual majors.
 - Sam Rebmann: Sam is an Environmental and Sustainability Studies major. She joined the SAP to help develop sustainable practices practices and gain more experience growing crops. She was also interested in helping to build a sense of community which is essential when working.
 - Ana Grimaldo: Ana is an Environmental and Sustainability Studies major. She joined the SAP to gain a deeper understanding of how the SAP works and challenge herself to something new to get out of her comfort zone. Ana hopes to pursue a career as a conservation biologist.
 - Lauren Harris: Lauren is an Environmental and Sustainability Studies major. Her hope was that having experience working within this field would benefit her in interviews and on resumes. She would love to work at a place like Floret Farms or own her own greenhouse. Working hands-on with flowers every day is her dream.
 - o Lauren Valli: Lauren is an Environmental and Sustainability Studies major. She is a jack of all trades, with experience in marketing, photography, sustainability issues and policy, and hopes to one day become an environmental lawyer. Lauren served as the social media intern, and increased engagement with the SAP Instagram page by 114%.
 - Erica LaBar: Erica is an Environmental and Sustainability Studies major. She joined the SAP because of her interest in food security and accessibility, and used her time there to learn more about what it means to grow your own food. While working at the SAP, she also designed a hydroponic system with an emphasis on increased production of leafy greens through the off season and increased accessibility to healthy foods during the growing season.
 - Tessa Tobey: Tessa is an Environmental and Sustainability Studies major. Tessa is interested in soil health, and joined the SAP to learn more about how regenerative agriculture positively impacts the soil. She created a plan to help acidify the SAP's very basic soil in an environmentally friendly way, ensuring increased plant health without compromising the health of the soil.

- Olivia Reddy: Olivia is an Anthropology major. Olivia is very interested in the study of ethnomycology, or the relationship between indigenous peoples and mushrooms. She used her time at the SAP to not only learn more about agriculture, but to also design a system for the SAP to cultivate its own edible mushrooms. While doing this, she reached out to local mushroom grower Mycophile's Garden, who taught her the ins and outs of mushroom cultivation.
- Niabh Keenan: Niabh is an Environmental and Sustainability Studies major. She is interested in increasing the efficiency of the SAP's composting system, and implementing a form of vermicomposting. While designing her vermicomposting system, she also reached out to Wormies in Grand Rapids, a vermicomposting and composting education company. They helped her design a scalable vermicomposting system for the SAP.
- Veronica Sorensen: Veronica is an Environmental and Sustainability Studies major. She
 is interested in green energy and green energy policy. While working at the SAP, she
 analyzed the requirements and potential benefits of making the SAP completely solar.
- o Emily Padyjasek: Emily is an Environmental and Sustainability Studies major. She is interested in food accessibility and security. While working at the SAP, she pursued projects with different community partners. Initially planning on working with the Urban League of West Michigan's garden project, she shifted focus and worked with New City Neighbors at both their locations, downtown and at the SAP.
- 4. Volunteers: The SAP hosts weekly volunteers throughout the year, but they were canceled for most of 2020 per university policies. The SAP was fortunate to have Dr. Amanda Buday as a committed volunteer throughout the closures.



5. Student Organizations

- o Farm Club
- o Beekeepers Club
- Student Environmental Coalition
- 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. This was put on pause as a result of the coronavirus pandemic.

Outreach and Events

The SAP organizes, hosts, and participates in a variety of events throughout the year. While options were limited this year, it still was fortunate to participate in the following:

- 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 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 RA Orientation: The SAP's Farm Manager and Educator gave a presentation to share opportunities for students to get involved at the farm.
- o Farm Stand: In the spring of 2021, the SAP began an on-campus Farm Stand in place of the GVSU Farmer's Market.

Community Engagement

This year, the SAP donated 500+ pounds of produce to Replenish, the Community Food Club, and the Heartside Gleaning Initiative.

Jahaven Haye, the youth development specialist from the Urban League of West Michigan and GVSU alum, reached out to the SAP for assistance starting a youth-run urban farm on their campus in downtown Grand Rapids. Michael is supporting an intern who's focus is on food security to assist in their operations from time to time.

It also partnered with New City Neighbors, a local community development organization. New City Neighbors will utilize one acre of land at the SAP for its program providing job and life skill training to high school students.

Farm Production and Improvements

This year, the SAP focused on rebuilding its stamina after a year of rest. Some parts of the farm that were left fallow out of necessity in 2020 required work to bring back into production. The hoophouses were productive again this year and produce was shared through the SAP's Farm Share program, the GVSU Farmer's Market, Campus Dining, and Replenish.

Farm production was limited due to the decreased number of students on campus. The focus for the beginning of the 2021 growing season was to create more resilient infrastructure, using a time of decreased sales to ensure success when students return to campus. Infrastructure improvements included the installation of a semi-permanent irrigation system, the creation of a rotational crop plan to reduce weed pressure, and hoophouse repairs.

The Office of Sustainability Practices and the Farm Club joined New City Neighbors to help build a new hoophouse.



Featured Alumnus

Dulcee Boehm was one of the original students who dreamed up the SAP as part of her ENS 401 coursework.

Dulcee is both an artist and an advocate for contemporary art outside of large cities. Through the use of video, performance, and sculptural works, she applies a critical academic lens to rural life. She has exhibited work in a variety of contexts including Roots & Culture in Chicago, Illinois, the Krannert Art Museum in Champaign, Illinois, and an old cattle barn in Grinnell, Iowa.

She completed her Masters in Fine Art at the University of Illinois at Urbana Champaign and worked as a staff member at Ox-Bow School of Art & Artist Residency. She is currently the co-founder and co-director of a national archiving platform for artist-run spaces, called Impractical Spaces, and is a Visiting Professor at Grand Valley State University. In this role, she and her Curatorial Studio students presented a collection of interdisciplinary and multimedia artists at the "Systems Processing" art exhibit at the SAP.

Looking Forward

The COVID-19 pandemic continued to provide challenges and limitations to the 2020-21 year, but there is a light at the end of the tunnel. Despite a significant decrease in students on campus and limited opportunity due to pandemic restrictions, student involvement is bouncing back with interns working both with the SAP and numerous community leaders. If anything, the challenges brought on by the pandemic provided us with the opportunity to focus on infrastructure and our interdisciplinary roots, bouncing back with more energy and initiative than ever before. We look forward to approaching the new year with the energy we cultivated, providing students with a space to continue to learn and grow despite whatever challenges the future holds.

