



**GRAND VALLEY  
STATE UNIVERSITY®**

**SUSTAINABLE  
AGRICULTURE PROJECT**

Annual Report

July 1, 2021 – June 30, 2022



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## Message from the Advisory Council

Dear friends and colleagues,

2021-2022 has been a year of recovery. As the university began to re-implement in person classes, events, and programs, the Sustainable Agriculture Project followed suit, with class visits, volunteer hours, and internship enrollment beginning to reach near pre-pandemic numbers. The down time provided by COVID also allowed us to re-group and revitalize past and present initiatives, making the SAP more accessible and student-centric than ever.

With in-person classes returning to campus, we've seen an increase in the number of classes that utilize the SAP for tours, lectures and student projects. There has also been an increase in internship enrollment, with number approaching record highs even pre-pandemic. Moreover, we've revitalized the accessibility to produce and our public image by re-vamping our approach to social media and offering a downtown pick-up location for farm shares.

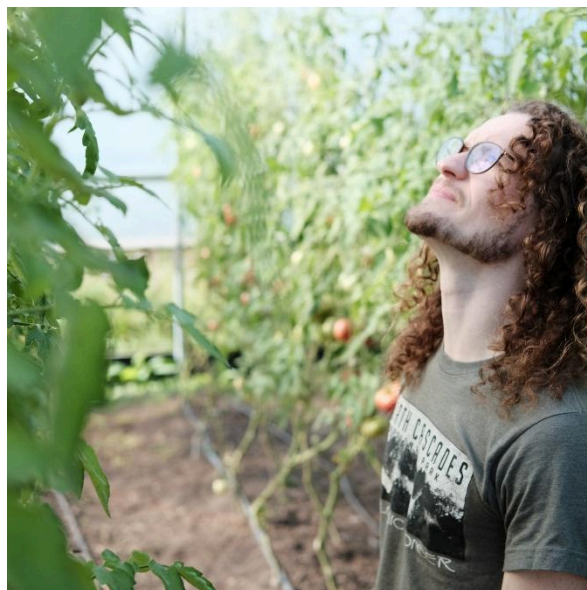
Overall, the previous fiscal year was a very successful comeback from the pandemic. While things are still slowly returning to normal, the SAP continues to grow and flourish with each challenge we face.

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, Michael Hinkle, Yumiko Jakobcic, George Lundskow, Kelly Parker, Mark Schaub, Steve Snell, and Jennifer Winther





## Executive Summary

This year, the SAP gradually returned to pre-pandemic operation, having interns complete projects in a hybrid format and welcoming classes, volunteers, and outside organizations to the farm to learn more about sustainable agriculture.

- o Increased campus interconnectedness by reintroducing campus organizations, such as TRiO Upward Bound and Energize Our World.
- o Expanded classroom use of the SAP with various ENS, BIO, NRM, and AFN programs and classes.
- o Improved internship accessibility with the utilization of flexible scheduling systems.
- o Increased overall internship positions across all semesters and expanded on the internship experience by providing opportunities of involvement in all facets of the SAP and with community partners.
- o Strengthened relationships with numerous community partners, both formal with New City Neighbors and informal with Blandford Nature Center's farm.
- o Revitalized SAP communications through a social media plan and universal aesthetic.



## Strategic Visions

### 1. Seeding Sustainable Food Practices

The SAP increased accessibility to sustainably grown produce to students on campus, with the return of weekly farms stands and the introduction of monthly farmer's markets. Volunteers at the farm were given access to a selection of choice crops, further connecting them to the work done at the farm.

### 2. Cultivating Leadership

SAP interns and farm crew saw quick introductions to positions of leadership across the country. Farm crew members from the 2021 and 2022 growing season adopted positions of leadership in numerous sustainability-related student organizations, including the Student Environmental Coalition, Farm Club, and the Beekeeping Club. The previous lead interns are either pursuing or currently undertaking positions of service across the United States, including serving in the Americorps Civilian Conservation Corps and the US Forest Service.

### 3. Nurturing Place

The SAP saw increased student engagement across the 2021-2022 with an increased number of summer interns, volunteer engagement, and class engagement. Student organizations utilized the space often, expanded beyond the typical use of organizations such as Farm Club into different organizations such as the meditation club and others.

### 4. Growing Community

The SAP is continuing to see connections across campuses, by expanding accessibility to services downtown and strengthening both formal and informal partnerships with different organizations in the Grand Rapids area. This year, the SAP offered a downtown pick-up option for recipients of the 2022 farm share. SAP interns also visited farms in Grand Rapids proper, working with both Blandford Nature Center, New City Neighbors, and other organizations.

# 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. Class participation is still recovering from the COVID 19 pandemic but is well on the way to recover.

- o BIO 319 Global Agricultural Sustainability: Students in this course utilized the SAP as a growing space, learning the intricacies of sustainable agriculture on a small scale. They also conduct research on organic soil amendments, and their impact on productivity.
- 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.
- o NRM 330 Environmental Pollution: Students in NRM 330 utilized soil from the SAP to test the effects of acid rain on agricultural soils.



## 2. Class Projects

- o Pollinator Gardens: Students in an ENS 201 course designed and planted native wildflowers in the hopes of increasing pollinator viability at the SAP. This project saw intensive crop planning, including plant analysis and pollination window stratification.
- o Composting at the SAP: ENS 201 students designed and built multiple compost bins for the SAP to test viability and functionality. These bins were utilized and analyzed for effectiveness by summer interns before being implemented on a larger scale. Testing of various bins is still being completed.
- o Microgreens and Increased Winter Production: ENS 201 students designed and created a microgreens shelf, complete with LED lighting. This shelf was designed to test winter production capabilities of SAP should multiple shelves be created. Testing of the shelf will occur in the coming winter.
- o Closing the Campus Loop: ENS 201 students created a plan to determine the needs of Laker Food's composting output. By properly measuring the monthly production of compost by-product, we can estimate the equipment and material needed if the SAP were ever to take on a large-scale endeavor such as absorbing the compost produced by Laker Food.
- o Events at the SAP: ENS 401 students designed an energy-efficient event barn based at the SAP, complete with an open event and classroom space and utility efficient capabilities.

## 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
- o 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

- o Fermenting and Bread Making: The Farm Manager & Educator taught SAP interns the basics of fermentation on a small scale.

## 5. Special Projects

- o This year, the Farm Manager & Educator led a gardening class as part of the TRIO Upward Bound Program.

## 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.



Wyatt Thorndill: Wyatt served as the Feenstra Lead Intern during the 2021-2022 season. Wyatt was a frequent volunteer who showed natural leadership skills and had incredible drive. An NRM major, Wyatt looks to live life to the fullest. Following graduation, Wyatt is looking to serve as a front-line firefighter for the US Forest Service, traveling across the United States' public land wherever fire comes.

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.



Hayley Blair: Hayley served as the Feenstra Intern for 2020-2021 and returned as a farm crew member for the 2021-2022 fiscal year. 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. Following graduation, she has been hired on as a Conservation technician, working for the prestigious CCC branch of Americorps.



Jake Torok: Jake is a Natural Resources Management major and Environmental and Sustainability Studies and Biology and ENS 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 also works part time at Hope Gardens in Grand Rapids, expanding children's access to food and sustainable gardening practices.



3. For-Credit Interns: These students design and develop internships to support the requirements of their individual majors.

#### Fall 2021

**Liam Walz:** Liam Walz served as the structure and tools intern for the Fall 2022 semester. Rather than taking on a project as many interns choose to do, Liam decided to complete his internship completely through farm work. Since he spent so much time at the SAP, he became a regular staple at volunteer hours and helped lead numerous groups of volunteers.

**Heidi Richman:** Heidi was the food security intern for the Fall 2022 semester. She conducted research on the viability of different late-fall crops as a source of local produce in a cold-weather climate such as Michigan.

**Sam Earhow:** Sam was the communications intern for the Fall 2022 semester. Working both at the SAP and part time for student housing, Sam looked to increase the connectivity of students to the farm via housing and the different on-campus apartments, whether via outreach or other initiatives.

#### Winter 2022



**Delane Matthyse:** Delane was the floral production intern during the 2022 planning season. Delane was interested in increasing the floral production capacity of the SAP and finding ways to utilize the increased number of flowers grown by the SAP. Delane implemented a bouquet creation guide to help volunteers, interns, and anyone interested create beautiful bouquets using the flowers included in the 2022 crop plan. She also designed a flower drying station, to create dried floral arrangements and shadow boxes to

sell during the off season.



**Macey Mikesell:** Macey is the structure and tools intern for the winter 2022 semester. Macey has a diverse background in the craft brewing scene, having tended to the ornamental hop garden at Founders while working there as support staff. With that background in hop care, Macey designed and implemented a new irrigation system for the hop gardens at the SAP. He also built new seed starting tables for the seed house and spearheaded the creation of composting bins for Molly's compost initiative.



Katie Scheuer: Katie was an ENS intern interested in food security and access. Working directly with Replenish and Professor Sinn's ENS 201 courses, Katie helped the SAP increase student's connection to locally grown, sustainable produce by implementing a plan for production of microgreens to meet the need of Replenish during the SAP's off-season.



Molly Tracy: Molly served as both the social media intern as well as the compost intern during the winter semester. She was responsible for keeping students engaged with our social media during the semester and helped increase engagement by providing photography services as well. As the compost intern, Molly created and initiated a pilot program to provide students with composting services on campus.

### Spring/Summer 2022

Liz Koetje: Liz was one of this year's composting interns. Rather than a traditional project, Liz pursued a report on composting alternatives. She sought to do a comparison of collected composting, do-it-yourself composting, and industrialized composting in Michigan. She wants to see what composting options are available for non-commercial or industrial operations. To do this she is comparing cost and benefits (both practical, community-based, and educational).



Emily Fredricks: Emily Fredricks was the floral production intern for the Spring/Summer 2022 semester. In addition to being a key player in the SAP's harvesting team, Emily oversaw the maintenance of the different flowering crops the SAP had to offer, including sunflowers, snapdragons, cosmos and celosia.





Hanna Derwent: Hannah was one of the social media interns over the summer and took a more unique approach to our social media presence. Rather than creating Instagram or Facebook posts, Hannah returned to our blog to create long-form interviews with attendees at SAP events, as well as interviews with SAP and GVSU alumni working at Blandford Nature Center's very successful farm operation.



Katie Gorman: Katie conducted various projects this summer that focus on creating visual and informational content about what the SAP grows and does in terms of farming and other agricultural work. She is seeking to connect what we do at the SAP to other resources/organizations within the GV community as well as the surrounding area (possible topics relating to these things include non-profit work, environmental justice, intersectionality, etc.) She is also working with Jake on revitalizing community gardens!



Kayla Forest: As the Food Access Intern, she is interested in looking into the food deserts that are surrounding the community and how we can provide fresh and healthy produce to those living in them. She is seeking to look further into what the different barriers are that surround communities that are considered food deserts, while finding a way in which those who receive food from the SAP through different programs such as Replenish can utilize those ingredients to prepare healthy, and fresh meals. She is looking to do this by

including a recipe card along with the food and a picture of the finished product, or offering cooking classes for those to attend, or classes on how to grow fresh produce in small spaces.

Lily Kostanko: Lily was one of the creative forces behind informational pamphlets sent out with crops to the campus food bank, Replenish, as well as to other sources across the community. She worked closely with other food access interns in designing and implementing recipe cards, storage information, and community outreach.



Marie Pozy: Marie was one of the creative forces behind the various recipes included in CSA's and farm shares. Using our crop plan, she created recipes from the various crops and implemented seasonality in their creation. These recipes, beautified by another intern this summer, will be made available to students picking up SAP produce at Replenish as well – helping increase the usability as well as access of fresh food!



Quoc-Khanh Nguyen: Quoc is interested in food security and accessibility, and how using novel techniques in sustainable farming can increase production. This summer, he designed us a hydroponics set up that maximizes vertical space and increases our access to fast growing leafy greens year-round.



4. Volunteers: The SAP hosts weekly volunteers throughout the year, at the beginning of the fall semester, the end of the winter semester, and for the entirety of the spring/summer semester. With student involvement ranging from 5-25 interns per session, volunteer hours provide an average of 100+ student contact hours in each week.



#### 5. Student Organizations

- o Farm Club
- o Beekeepers Club
- o 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. For the year of 2022, all plots were sold out to students.

## 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:

- o 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 Lower Grand River Organization of Watersheds: The SAP's Farm Manager and Educator gave a presentation discussing the role of agriculture in a healthy watershed.
- o RA Orientation: The director of the Office of Sustainability Practices presented at RA training about sustainability across campus, including student involvement at the SAP.
- 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

The SAP has been involved with different partnerships, both formal and informal. Formally, the SAP works with New City Neighbors, a non-profit organization working in Grand Rapids proper to help Grand Rapids youth connect with food and community. Informally, the SAP has also been working with Blandford Nature Center Farm to give interns and farm crew more exposure to urban agriculture, and to strengthen the connection of the SAP with the Grand Rapids community.

The SAP has also given numerous tours to other places of education across West Michigan. These institutions include Reese Puffer Elementary, based in Muskegon, Grand Rapids Elementary, Middle, and High School, GRPS Union High's gardening club, Aquinas College's Office of Sustainability, the Lake Michigan School for special needs students, and the Energize Our World summer camp.

## Farm Production and Improvements

For the 2021-2022 year, the farm focused on increasing the aesthetic and educational values it offers the university and surrounding community. This work included generalized clean up and changes to beds across the site, the implementation of new, more accessible signage, an adoption of a social media plan, and an emphasis on year-round internship opportunities and projects. This approach saw a substantial increase in student engagement via social media, intern enrollment, and utilization of the SAP for events by student organizations.





## Featured Alumnus



Chris Galbraith served as a frequent volunteer and farm crew member during his time at Grand Valley State University. Growing up working on small farms in Northern Michigan, Chris furthered his education in agriculture as a Plant Biology major at Grand Valley State University. Taking his experience from both his degree and his time at the Sustainable Agriculture Project, Chris managed his own farm for two years post-graduation.



Looking to provide resources for small, sustainable farmers across the globe, he is currently pursuing a masters in horticulture. His research is in the development of integrated weed management systems for vegetable production that increase productivity while advancing resource conservation and agroecosystem health. For his efforts, he received a SARE research grant in 2020.

## Looking Forward

The COVID-19 pandemic allowed us to make lots of necessary and fundamental changes to our approach to the management of the SAP. Following a slower year of recovery, our connection to community and students increased. Internship numbers are beginning to reach record highs, with each intern bringing new, unique projects to the farm. Informal and formal community partnerships are providing students with a larger breadth of opportunities to learn more about different facets of sustainable agriculture. The farm has never been more accessible, with more communication with Replenish and an option for downtown pick-up becoming available through our farm share program. While the pandemic has been a struggle for all, and continues to bring forth issues, the SAP is continuing to provide a place of growth for those in the GVSU community.

