Knoll Food & Garden Educator 2021 Report

Overview

Globally, the presence of COVID-19 is still impacting our day to day interactions on campus and beyond. The spring season saw more of a return to event scheduling at the Knoll as COVID restrictions shifted. Summer language programs resumed in-person on-campus, though there were fewer interactions this summer as everyone eased back into gatherings and collaborations knowing the that the safety considerations often required immense preparation, planning, and ultimately flexibility—and that collectively, our energetic resources have been exhausted. Global and regional supply chain shortages of objects and also labor, predictable and not, help to reinvite consideration of robust local systems and thick, well-tended relationships of care and support. Students, faculty, and staff were required to be vaccinated for COVID-19 in preparation for our return to fall, and high fall 2021 enrollment (2,880 students on campus), housing, and staffing shortages (especially in Midd Dining and Facilities) all continue to impact our daily lives, modes, and health in small and large ways.

Interns and student garden volunteers are the beating heart of the Knoll. We are grateful for the over 180 students who signed up and came out to learn and work alongside us during Garden Volunteer Hours as we grow and nourish our community.

Interns' massive generosity and intelligence demonstrated through their flexibility and ability to welcome so many peers into our shared work. Interns Hannah Cecilia Forest Night Laga Abram '23, Isabela Bahadorzadeh '23, David Goldsmith '23.5, Tashi Choden Sherpa '24, Bryn Hester '22 supported us during the academic year, and our summer crew was comprised of Samia Jahan Sami '24, Andrés Oyaga '23, Day Ashworth '24, and Raechel Zeller '22.

Garden volunteer hours continued on in their 19th season led by student interns, and were well attended. In the spring semester, 14 students (fall, 22 students) received **Physical Education credit** for attending at least four two-hour garden volunteering sessions. Students who attend four sessions tend to reflect on having a positive experience of deeper understanding of, and connection to the Knoll and by extension, Middlebury College, in seeing the many ways our work is threaded throughout relationships with various departments. Garden volunteer times were managed through an online signup platform and were offered to students only (per COVID restrictions) five times per week for two-hour long sessions during the academic year from March 1, through summer, to October 30.

Spring 2021 Schedule from 3/30 - 5/28

Tuesdays: 1-3pm Thursdays: 11-1pm

Fridays: 11-1pm** and 2-4pm

Sundays: 9-11am**

Fall 2021 Schedule from 9/13 - 10/29/21

Mondays: 8:30-10:30am Tuesdays: 1-3pm** Wednesdays: 8:30-10:30am

Fridays: 2-4pm Saturdays: 10am-noon

^{**}Please note, these sessions are held as BIPOC (Black, Indigenous, and other people of color) affinity space, facilitated by BIPOC student interns and staff

Our summer interns returned to a more typical summer internship experience, which spanned 15 weeks from June 1 – September 12. Interns lived at Weybridge House and worked 35-30 hour weeks based on the season's needs and were responsible for learning about and carrying forward all aspects of care for the garden, its inhabitants, and the site. The continuity of connection to place through the seasons as the garden transforms is a unique feature of this experience and is treasured by all, especially after not being able to host student workers during the 2020 summer season.

Growing Season

conventional gardening wisdom for several generations has most gardeners in Middlebury looking to start their tender annuals on Memorial Day and to expect a first frost by October 11—roughly 130 frost-free days (just over a third of the year). As we face the unpredictability of climate change and see local impacts, each year presents new and different challenges. This year, we had unseasonably warm early season temperatures (from the teens up to March high temp of 72 degrees within 5 days) and an incredibly long frost-free period from April 27 — October 24 first frost—180 days or almost half the year; almost forty percent longer than an average year's growing season. While this extended season has benefits and downsides, its unpredictability is a key, tricky feature. While the summer did not feel as consistently hot and dry as the past two years of drought, the annual precipitation (16.89 inches to date) indicates that conditions are still significantly drier than average.

Garden crops, sales, and partnerships

Major crops continued to be first and second quality Swiss chard, first and second quality kale, carrots, onions, garlic, winter squash, tomatoes, tomatillos, parsley, corn and beans. Secondary crops included lettuce, French, Korean and Japanese radish, ground cherries, napa cabbage, sweet potatoes, leeks, scallions, peas, a variety of basils, asparagus, beets, other herbs including perilla, sage, thyme, bronze fennel, chives and Chinese chives and an assortment of cutting flowers including zinnias, dahlias, sunflowers and more. In all, we grew over 85 varieties of annual crops in addition to the perennials planted throughout.

As in the past, we focused our efforts on the following commitments and community partnerships:

Midd Dining and Retail Operations: We sold our core group of crops (Swiss chard, kale, tomatoes, carrots, flowers, and herbs) to Atwater Dining Hall, Midd Catering and the Retail Operations group including the Grille, the Tavern on the Tee restaurant at the Ralph Myhre Golf Course, and Bread Loaf kitchen. We made deliveries 2-3 times weekly throughout the harvest season. We are deeply grateful for our many colleagues throughout Midd Dining and Retail Operations who gracefully continued to work with us throughout a difficult fall—and even celebrated the produce through recipes like kimchi and other all-Knoll-grown produce dishes.

<u>Cut-Your-Own Flowers</u>: synonymous with walking down to the Knoll was walking home with a handful of flowers. Students were invited to come and clip in the annual and perennial flower beds, which are also cultivated as insectary areas for pollinator and beneficial insect food, habitat, and overwintering sites as part of micro-agroforestry schemes.

HOPE (Helping Overcome Poverty's Effects): As in past years, we arranged with HOPE to grow a few specific crops to supplement their gleaning efforts that supply the food shelf in Middlebury (Addison County's largest). These totaled 2,257 pounds of produce distributed to our local community

Crop type donated	Weight in pounds
Garlic	31.5
Storage Onions	383.5
Storage Carrots	338
Brussels Sprouts	14.5
Winter Squash (Butternut, Acorn, Delicata)	1490
Total	2257.5

<u>Nulhegan Food Security Project</u>: We were able to continue the third year of growing heirloom Abenaki and indigenous beans in partnership with Chief Don Stevens of the Nulhegan Band of the Coosuk-Abenki Nation. We resumed the second year of the corn hand-pollination and seed saving aspect of our partnership. We were also able to share a harvest of some 300 pounds of produce, primarily winter onions, sweet potatoes, squash, dry beans, and corn.

Courses, Other Partnerships, and Events at the Knoll

The Knoll hosted over 55 official College events with partners from many other departments (please see appendix at the end of this report). We are extremely grateful for the work of the Events Management team and Knoll Events Intern Isabela Bahardozadeh '24 for their support of making possible many of the special events that help to shape a Middlebury student experience. As indoor campus events were not allowed to provide food given COVID restrictions, the Knoll provided an important source of community and gathering space and we are grateful for the opportunity to do so.

Of particular note regarding events this year, we were delighted to work with the Climate Action Capacity Project and the Franklin Environmental Center at Hillcrest to host the closing day of the Clifford Symposium. This year's theme this was "Radical Implications: Facing a Planetary Emergency." Led by CACP and Knoll intern Andrés Oyaga '23, Knoll interns helped organize stations set up across the site offering a variety of reflection and gardening activities. Several hundred faculty, staff, and students joined in attendance.

The multi-week Perennial Harvest Festival closing event was hosted by the Knoll and the New Perennials Project and featured student dance performance, presentations by community partners, and a musical theater performance of Doc Lyle Sol's Medicine Show through the Town

Hall Theater's Courageous Stage platform. We are grateful to the New Perennials Project for their ongoing support and collaboration.

Fall Family Weekend welcomed thousands of visitors to Middlebury, and several hundred visitors made their way to the Knoll for an Open House with garden snacks, some gardening activities, and as a picnic destination.

Many course collaborations continued, and our COVID environment provided new opportunities for local field experiments and field trips at the Knoll. We continued hosting the annual field experiment for the Environmental Studies introductory lab course. Several of Dr. Peter Ryan's Hydrogeology lab experiments explored connections between well recharge, water table, and soil pit data, and the summer prearrival MiddSIP STEM program collected data at the Knoll and also celebrate the end of the scholars' week on campus with a closing pizza oven party hosted by peer older LA Posse members who were also Knoll interns this year. The Knoll continued to be a popular site for data collection about invertebrate and insect life (particularly fireflies) through Dr. Greg Pask's courses and research. Dr. Molly Anderson's Introduction to Food Studies course ventured out to explore the site through an early assignment, and Dr. Carolyn Dash's first year seminar course on Adirondack Conservation explored the Knoll as one of their field trips. A course on Mammology partnered with MALT for observation of the TAM and human-wildlife conflict/coexistence using camera traps, transects and observation.

Recommendations

Our mission is to explore food as a medium to cultivate well-being in people, place, and the planet. In doing so, our work begins with understanding and dismantling oppression, with particular attention to the racism, land theft, cultural erasure, and colonial supremacy that built our food system and remain at the fore. As the Knoll, we commit to creating access for people who have been barred access from the freedom to choose whether, and how, to engage with agriculture and the land. We aim to broaden understanding of the political, historical, and cultural frameworks and hegemonies, including white supremacy, that have built our predominant narratives and understandings of the food system, particularly in New England, and in our landscape.

If these are some of our aspirational goals; then we must address limitations of the site and our programs (e.g., the Knoll is not an ADA accessible site and is only beginning formal conversations around what appropriate land acknowledgment entails, and how it is framed). We have timely and deep work to do, and the ability to prioritize and center this is full of possibility—but not without additional staffing support.

• The Knoll is maximally adapting to the specific constraints of our site (e.g., no electricity or permanent plumbing, no maintenance of the site in winter, no indoor event planning space) but in order to achieve College goals around accessibility and inclusivity, we would greatly benefit from a master planning process, particularly to address immediate safety and accessibility issues.

- In the short term this entails creating a safe pathway access and road crossing via a route that conforms with Universal Design standards, complete with appropriate lighting
- In the longer term this process could evince the need for a permanent structure that addresses suitable restroom facilities, food wash, pack, and storage requirements, and educational programming space.
- Sustaining this work principally through one part time (0.575 FTE) position is quite a long stretch; deepening the work within the current staffing regime is not feasible.
- Increasing opportunities for equitable involvement, including specific affinity spaces and programming, should continue to be a primary program focus for the future.
- Deeper and sustained action on behalf of our collective Middlebury to uplift and draw critical knowledge holders, particularly BIPOC, into decision-making about land, partnership, and knowledge sharing.

Gratitude

To the land, this place, and its forebears for sharing its abundance with us. May our work lift up the love and sacrifices of those who came before to help care for the ones who come next.

Thanks to the entire Franklin Environmental Center at Hillcrest team to support the efforts at the Knoll.

Thank you to all of our colleagues at Middlebury College as we continue to weather this year together. For support with the Knoll's day-to-day operations, we wish to thank our colleagues in Facilities, Dining Services, Midd Catering, Communications, Events Management, Student Activities and Orientation, the Anderson Freeman Center, The Scott Center, the Innovation Hub, the Center for Community Engagement for lending indoor workspace during the summer, Public Safety, and at the Midd Recycling Facility.

To long-time garden friends Jay Leshinsky and John Derick for their continued guidance and counsel.

To our dedicated Addison County community, who we dearly missed sharing opportunities to learn and grow together: thank you for adapting to the changing landscapes of our partnerships to put the safety of students and community members first. We look forward to your return to campus, whenever that comes, to restore the vibrancy and richness of interaction, friendship, and collaboration.

And of course, to the students who dreamed up and continue to collectively dream and craft what the Knoll is: for each other, for all of us.

Prepared by Megan Brakeley '06, Food & Garden Educator | December 1, 2021

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Appendix. Following is a list of all of the official class collaborations and events hosted in partnership with others on campus.

Date	Time	Event
		Pete Ryan - GEOL 255 Hydrogeology Lab - Well recharge
Thursday, April 15, 2021	2:30 – 3:30pm	experiment
Friday, April 23, 2021	5:10 – 7:50pm	CAMPFIRE KIT NEEDED - MMC campfire at the Knoll
Saturday, April 24, 2021	all day	Hillel, Havdalah Bonfire
Saturday, April 24, 2021	6:30 – 8:30pm	RIDDIM dance troupe social
Monday, April 26, 2021	5:30 – 7:30pm	CAMPFIRE KIT NEEDED - MMC campfire at the Knoll
		Pete Ryan - GEOL 255 Hydrogeology Lab - Well recharge
Monday, April 26, 2021	2:30 – 3:30pm	experiment
Saturday, May 1, 2021	4:30 – 6:30pm	Scandinavian Picnic - no campfire kit needed
Saturday, May 1, 2021	4:30 – 6:30pm	Energy 2028 EcoBreaks first year Pizza Event
Saturday, May 1, 2021	7 – 8:15pm	DRIVING ACCESS needed - Hillel picnic dinner
Thursday, May 6, 2021	2 – 4:45pm	Pete Ryan - Hydrogeology - Soil pits lab
		CAMPFIRE KIT, INTERN, and DRIVING ACCESS NEEDED - Sunday
Thursday, May 6, 2021	6 – 7:30pm	Night Enviro Group (SNEG) pizza and bonfire at the knoll
Saturday, May 8, 2021	7 – 10pm	CAMPFIRE KIT NEEDED - Nocturne: Bandolier Lullaby Performance
		CAMPFIRE KIT AND DRIVING ACCESS NEEDED - Ski Patrol End of
Tuesday, May 11, 2021	6:30 – 8:30pm	Year event
Wednesday, May 12,		Health and Wellness Education - Stressbusters labyrinth
2021	5 – 6pm	meditation
Friday, May 14, 2021	3 – 4pm	Community Friends Walk
Friday, May 14	4 – 6:30pm	BIPOC community event w/ AFC
Saturday, May 15, 2021	5 – 8pm	VEHICLE ACCESS needed - MiddMUN dinner event
Sunday, May 23, 2021	5 – 8pm	Knoll end of season Intern Gathering
Tuesday, June 1, 2021	all day	Summer Interns' first day
Tuesday, June 15, 2021	10-11:30am	Marc Lapin Natural History visit
June 16-29, 2021	9am – 12pm	Weybridge Preservation Interns periodic work sessions
Wednesday, July 28, 2021	9am – 12pm	Teen Center cooking class - outdoors at Teen Center
Friday, August 6, 2021	11am	Language School Graduation - Prepare flowers for catering
Wednesday, August 25,		
2021	11am	Alumni College - Prepare flowers for catering
THURSDAY,		
SEPTEMBER 2, 2021	3 – 5pm	International Student Orientation Leader Pizza event
Friday, September 3, 2021	1 – 3pm	MiddSIP Pre-arrival lab and fieldwork with Peter Ryan
Saturday, September 4,		madon Tre difficulties and netawork with reter fryan
2021	4 – 7pm	MiddSIP Closing Pizza Dinner Event with older LA Posse interns
Monday, September 6,		
2021	5 – 8pm	First@Midd Event - Pizza, tours, welcome
Tuesday, September 7,		MiddView Orientation Groups - informal visits throughout the
2021	All day	week
Thursday, September 9,	0.20 44.20	
2021	9:30 – 11:30am	Orientation Open House at Franklin Enviro Center

Thursday, September 9, 2021	9:30 – 11:30am	Orientation Open House at Franklin Enviro Center
Friday, September 10	4 – 7pm	Concerned Students at Midd - Pizza Event
Saturday, September 11,	·	
2021	4 – 6pm	Campfire: Health and Wellness Peer Educators' Group Event
Saturday, September 11, 2021	8:30-11:30	MiddView Optional Event - Garden Volunteer Hours for first year and transfer/exchange students
Sunday, September 12, 2021	10 – 11am	MiddView Optional Event - Scott Ctr Labyrinth Walk
Sunday, September 12, 2021	8:30-11:30	MiddView Optional Event - Garden Volunteer Hours for first year and transfer/exchange students
Tuesday, September 14, 2021	10 – 11am	MiddView Optional Event - Scott Ctr Labyrinth Walk
Friday, September 17	1:30 – 2:45pm	Rebecca Gould - Religion, Ecology, Justice class held at Knoll
Friday, September 17	5 – 7pm	Energy 2028 EcoBreak Pizza
Saturday, September 25	11am – 2pm	Clifford Closing Event @Knoll: "Life at the Knoll" with pizza, full catering, stage events, scything practice
Tuesday, September 28, 2021	1:30 – 4:15pm	ES 112 Lab - Carrot Experiment Data collection
Wednesday, September 29, 2021	1:30 – 4:15pm	ES 112 Lab - Carrot Experiment Data collection
Thursday, September 30,	1.20 4.15 mm	FC 113 Lab. Counct Figure vita and Data collection
2021	1:30 – 4:15pm 11:45am –	ES 112 Lab - Carrot Experiment Data collection
Friday, October 1, 2021	2:30pm	ES 112 Lab - Carrot Experiment Data collection
Tuesday, September 28	3 – 4pm	Innovation Hub - VT Ventures/Knoll Sustainability Share-out
Thursday, September 30	2 – 3pm	Entomology Course lab, MOB Presentation
Friday, October 1	2 – 3:30pm	Chief Don Stevens - Harvest Celebration + corn baking
Friday, October 1	4 – 7pm	Knoll Thank You Pizza following Garden Volunteering Hours
Friday, October 1	4:45 – 7:45pm	Chinese Society Moon Festival Gathering
Saturday, October 2, 2021	5:30 – 7pm	Private Langerman Family Memorial Sunset Gathering
Tuesday, October 5, 2021	9:30 – 10:45am	Carolyn Dash First-Year Seminar class visit
Thursday, October 14, 2021	4 – 7pm	Perennial Harvest Days 2021 - Educational Panel
Friday, October 8, 2021	3-6pm	FFW Open House, Garden Help, and Pizza Oven Event
Saturday, October 9, 2021	3-6pm	Midd FIRE (Fostering Inclusivity in Recreation and the Environment) + Knoll Collaboration Pizza
Monday, October 11, 2021	4:30 – 7:30pm	Anderson Freeman Ctr Coming Out Day Campfire celebration
Thursday, October 14	4 – 7pm	New Perennials Project - Perennial Harvest Days 2021 - Food/Ag systems panel
October 19, 21	7:15-9:15pm	Knoll Korean vegetable harvest and Kimchi making with Knoll Produce with RAISINS (Radical Asians) at Innovation Hub kitchen
Friday, October 22, 2021	1:15 – 5:15pm	Perennial Harvest Days 2021 - main Knoll event - dance performance, musical theater performance, tours, presentations
Friday, October 29, 2021	4 – 7pm	Knoll Thank You Pizza - Final Garden Volunter Hours Closing Celebration