Terp Farm is the University of Maryland’s sustainable farming operation dedicated to growing produce for the campus dining program, supporting educational opportunities for students, and providing food to those in need. In 2014 Dining Services, in collaboration with the College of Agriculture and Natural Resources and the Office of Sustainability, launched the three year pilot program for the farm. The College of Agriculture and Natural Resources provided two acres of land at the Central Maryland Research and Education Center in Upper Marlboro, MD; researchers and staff at the facility and in the college share technical advice and expertise with Terp Farm. Terp Farm helps fulfill a major component of Dining Services’ Sustainable Food Commitment: purchasing 20% local and sustainable foods by 2020. In its first two years of operation, Terp Farm produced 19,275 pounds of produce while continuing to build its network of stakeholders, all invested in sustainable food and agriculture.

11,233 POUNDS OF PRODUCE PRODUCED
796 PEOPLE INVOLVED ON THE FARM
7 ACADEMIC COURSE PARTNERS
As the second growing season at Terp Farm reaches completion, we can reflect on the year with feelings of accomplishment, satisfaction, and eagerness for the next season to begin. 2015 marked the first full production cycle for the project, and we did a lot to expand and strengthen the operation. In addition to adding more variety to our production and improving overall crop yields, we also focused on developing our infrastructure and building our relationships with the campus and community. We hosted our first ever Fall Harvest Festival, which attracted about 500 visitors to the farm on a warm Friday afternoon in October, and served as a perfect celebratory cap to a successful year. This is not to say that the year did not come without a few unexpected challenges: from delayed plantings in the spring due to persistent rains that drenched our soils; to shuffling around various construction projects as we settle into our new space. But we are also creating resiliency, and there is much promise looking ahead as we peruse seed catalogs and begin to plot out next season's production plan. We owe many of our achievements this year to the students, faculty, and staff that have shown an incredible level of dedication to the project—that and a few days of warm sunshine, and of course rain when it's needed.

As ever,

Guy H. Kilpatric
Lead Agricultural Technician

Meet Guy H. Kilpatric
Lead Agricultural Technician

Farmer Guy grew up in the foothills and valleys of Western Maryland, where life is steeped in agricultural heritage – though he is a first-generation farmer in his family. His diverse skill set and holistic approach to farming comes from many years of experience on organic fruit and vegetable farms, in addition to completing the Apprenticeship in Ecological Horticulture at the University of California, Santa Cruz. His knack for agricultural sustainability is as evident as his passion for growing delicious food, which is truly an inspiration to anyone who visits the farm.

PRESS RECOGNITION

Terp Farm has been in the news in 2015! We were eager to share our story and progress with new audiences.

Here are some of the places that have featured Terp Farm in a story or segment:

» Big Ten Network LiveBIG
» UMD Campus Sustainability Progress Report
» Washington Post "In Prince George's, Turning Apple Cores and Banana Peels into 'Gold'"
» CBS Baltimore News Segment
SUSTAINABILITY AT TERP FARM

Terp Farm is supported by the University Sustainability Fund, and our mission is to be a model of environmental stewardship. Here’s how we practice sustainability on Terp Farm.

**ECONOMIC**
Terp Farm does not sell produce for profit, but instead aims to grow enough produce to offset the costs of managing the farm. The high tunnel enables year-round food production and harvest. Terp Farm plans its plantings based on Dining Services chefs’ needs.

**ENVIRONMENTAL**
Terp Farm makes all of its decisions with environmental impact in mind. Local food helps the environment by reducing transportation and following growing seasons. Crop rotations, cover crops, and composting build soil health. A pollinator garden and border plantings create a welcoming habitat for natural pollinators.

**SOCIAL**
Terp Farm is an educational resource for the community. In its first season, Terp Farm hosted interns, academic classes, and volunteers to work and learn on the farm. In the future, Terp Farm will welcome students and other community members to volunteer. Terp Farm donated produce to hunger relief organizations—including the UMD Campus Pantry—and will donate 5-10% of future harvests.

**Food Donations**

**Collaborative Planning**

**Local Food**

**Resource Conservation**

**Year Round Crops**

**Educational Center**

**Soil Health**

Terp Farm 2015 | 3
In 2014, Terp Farm received a University Sustainability Fund grant to fund a three year pilot program. After two years, here’s what Terp Farm has spent.

**Diagram:**
- **57% Spent (2014-15)**
- **43% Remaining**

**Bar Chart:**
- **Crop Inputs:**
  - Grant Allocation Remaining
  - Spent 2014
  - Spent 2015
- **Integrated Pest Mgmt:**
  - Grant Allocation Remaining
  - Spent 2014
  - Spent 2015
- **Materials:**
  - Grant Allocation Remaining
  - Spent 2014
  - Spent 2015
- **Farm Infrastructure:**
  - Grant Allocation Remaining
  - Spent 2014
  - Spent 2015
After the second season, the team made modifications to the initial grant budget based on realities of implementing the vision for Terp Farm. Far less money was needed for pesticides and a walk-in cooler than expected. Thus, these funds have been diverted to propagation supplies, irrigation, and other key material inputs.

*High tunnel valued at $17,538; donated by Rimol Greenhouse Systems.*
Year Two Kicks Off

After a rainy start to the season, Terp Farm jumped into its first ever productive spring. Three UMD classes regularly volunteered at the farm: Plant Sciences Capstone (PLSC460), Environmental Horticulture (PLSC452), and Crop Production Practices (INAG213). Two-time Terp Farm summer student staff and Plant Sciences major Karyn Owens began developing a food safety plan as her capstone project; this plan was the first step in obtaining Terp Farm’s Good Agricultural Practices (GAP) certification. Another course, Introduction to Environmental Health (SPHL498N), came out for a one day tour and volunteer session.

One of the most exciting events of Spring 2015 was the high tunnel workshop in collaboration with Future Harvest-Chesapeake Alliance for Sustainable Agriculture (FH-CASA), an organization that promotes sustainable agriculture in the Chesapeake Bay region. Five students and ten farmers joined together for two days to learn about how high tunnels extend a farm’s growing season and to build Terp Farm’s second high tunnel.

TERP FARM GREW 842 LBS OF PRODUCE IN SPRING 2015

Swiss chard seedlings propagated early to get a head start for the summer

carrots harvested in winter 2015

local farmers and UMD students joined together to learn about and construct the Terp Farm greenhouse
Students Dig In

Four student staff members, two of whom were supported by the Institute of Applied Agriculture, worked at Terp Farm this summer. Meet this season’s crop of student farmers:

Michael Perise is a student in the Institute for Applied Agriculture. He has worked in food and farming his whole life in his family’s vegetable garden and with local farmers and farmers markets.

Karyn Owens, December 2015 graduate and Plant Sciences major, returned to Terp Farm for her second summer. Her work on Terp Farm continues her family’s history of many generations of farming in Maryland.

Anh Doan is a senior Biology major. Before coming to Terp Farm, Anh worked on his uncle’s organic vegetable farm in Virginia and as a farm assistant in Vietnam.

Jonathan Hollingsworth is a student in the Institute for Applied Agriculture. He hopes to use his agriculture skills to sustainably grow vegetables in an ecovillage or intentional community after graduation.

Terp Farm hosted groups from the Accokeek Foundation, an organization supporting environmental stewardship and sustainable agriculture, and Upward Bound, a UMD program that provides academic and career guidance for area high schoolers in order to prepare them for college. Both groups toured and volunteered at the farm. At the end of the summer, students from the Environment, Technology, and Economy Scholars program helped out as part of the annual Scholars Service Day. Many UMD staff members also visited Terp Farm to learn about vegetable farming.
In Summer 2015, Terp Farm received its Good Agricultural Practices (GAP) Certification. GAP Certification includes the development of a food safety plan, ongoing documentation through logs and analysis, and an audit from the Maryland Department of Agriculture. All of these components ensure safe food and require that farms put in place response plans to worker or volunteer injury. Food safety plans reduce the risk of microbial contamination and the spread of food-borne illness. Ultimately, the GAP Certification makes Terp Farm safer for everyone—the students eating the food on campus and the students volunteering out on the farm.

Snapshot of the Food Safety Plan

» CROP PLAN OVERVIEW
  • Terp Farm grows over 90 unique varieties of vegetables in succession throughout all four seasons.

» FARM AND FIELD
  • All Terp Farm volunteers and workers are trained on food safety and required to follow specific procedures on the farm.
  • Water sources are regularly tested for pathogens and contaminants.
  • Animals are kept out of all production areas.
  • Terp Farm uses compost from Western Branch, a Prince George's County facility that regularly conducts safety tests on the compost.

» FIELD HARVESTING AND TRANSPORTATION
  • The Terp Farm team built a washing station inside the high tunnel to effectively clean and sanitize vegetables.

» PACKINGHOUSE AND STORAGE AREA
  • Food storage and transportation areas and containers are kept clean to ensure food is safe when it arrives on campus.
Gaining Momentum

Terp Farm welcomed back students from Fruit and Vegetable Technology (PLSC443) and Intro to Sustainable Agriculture (INAG123) for a second fall of volunteering. Introduction to Environmental Health (MIEH300) students also visited and worked at the farm.

For the first time, Terp Farm had fall semester interns: summer staff Karyn and Michael stayed on through the fall. Fall interns also got a chance to learn and practice operating the tractor. Other new visitors were interns from the university’s Dietetic Internship program. The dietetic interns spent a day on the farm to kick off a week of working on sustainable food projects.

Terp Farm also teamed up with University of Maryland Extension to host nine Master Gardeners for an advanced training workshop. The Master Gardeners learned about tomato trellising techniques used on the farm and discussed integrated pest management strategies.

FALL HARVEST FESTIVAL

Opening the Gates

On October 9, 2015, Terp Farm held its first ever Fall Harvest Festival. This event was the first time that the wider campus community was invited to Terp Farm, and one of the main goals of the Harvest Festival was to expose more students to the work being done on the farm. The Harvest Festival also aimed to educate students about the food system, to excite students about sustainability, and to celebrate Terp Farm. On all accounts, the Harvest Festival was a success.

Nearly 500 people attended the Harvest Festival, primarily UMD students. While this meant that many students learned firsthand about Terp Farm and sustainable food, it was also a much larger crowd that was expected. This caused some challenges, namely a shortage of food and shuttle buses, but is a lesson that will better prepare Terp Farm for future events.

492 People Attended
- 362 Students
- 49 Faculty/Staff
- 39 Volunteers
- 35 Other
- 7 Alumni
The Terp Farm team is excited for the last year of the pilot. Key season goals include:

**Relocation of field plot:** the Upper Marlboro Facility staff identified a better field plot for our use. Field production will now be next to the high tunnel and washing station.

**Expand wash, pack, and storage area:** streamline and improve the areas used for washing, packing, and storing vegetables.

**Post-pilot strategy development:** develop business plan for Terp Farm beyond the three-year pilot and apply for external grants to expand its teaching capacity.

**Host more volunteers and a second Harvest Festival:** increase opportunities for students to volunteer at Terp Farm and host a second Fall Harvest Festival.

*1200 lbs of delivered produce came from generous contributions by researchers at the Maryland Experiment Station.*

**Terp Farm Crop Yield**

- Broccoli & Cucumbers: 574 lbs
- Peppers: 1411 lbs
- Greens: 1658 lbs
- Cabbage: 601 lbs
- Turnips & Carrots: 459 lbs
- Herbs: 445 lbs
- Summer Squash: 1844 lbs
- Tomatoes: 3897 lbs
- Sweet Corn: 347 lbs

**TOTAL:** 11233 lbs

**Visitors and Volunteers**

- Academic Courses [106]
- UMD Staff [70]
- Workshops [70]
- Student Staff [6]
- Living Learning Programs [44]
- Event [500]

**Produce Deliveries**

- Catering
- Dining Halls
- Donations
- Promotions
- Restaurants

*Produce in Pounds*

- Restaurants
- Promotions
- Donations
- Catering

**Terp Farm Crop Yield**

- **TOTAL:** 11233 lbs

**Produce Deliveries**

*1200 lbs of delivered produce came from generous contributions by researchers at the Maryland Experiment Station.*
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