LaFarm Annual Report 2013

LaFarm & The Lafayette College Sustainable Food Loop

Sarah Edmonds

Metzgar Environmental Projects Coordinator & Manager of LaFarm, The Lafayette College Community Garden & Working Farm
LaFarm is one of several sustainability initiatives at Lafayette College. Located three miles from Lafayette College’s Easton, Pennsylvania campus, LaFarm is a 2-acre community garden & working farm that uses natural farming practices to grow food for the Lafayette College community. LaFarm is one-third of the Sustainable Food Loop at Lafayette, which aims for a sustainable food system model that includes cooperative dining services and campus wide food waste composting.

LaFarm Community Garden & Working Farm is a site for teaching, research, outreach, growing produce and building community and healthy soil. Our daily work and our long-term goals aim to build an understanding of the critical role of food and farming in sustainable environmental stewardship at the college and beyond.
Goals: Steps Taken, Outcomes Observed

- Food Loop
- Outreach
- Academic Integration
GOALS IN ACTION:
LA FARM AND THE SUSTAINABLE FOOD LOOP

Food Waste Composting

Dining Services

Bushkill Creek Watershed

LaFayette College Dining and Compost

LaFayette Annual Report 2013
Goals in Action: LaFarm Produce for Campus Use

Total Pounds of Produce Sold from ½ Acre: 2,308.5 Lbs

- Basil and Mixed Herbs
- Beets - Mixed
- Cabbage - Red and White
- Carrots - Mixed
- Cauliflower and Broccoli - Mixed
- Cucumber - Mixed
- Eggplant - Mixed
- Kale - Mixed
- Onions - Red, White and Green
- Peas - Snow and Sugar
- Peppers - Bell, Sweet and Hot
- Potatoes - All Blue, Red, Russet and Kennebec
- Radish - Watermelon
- Shallots - Fancy Conservor
- Squash - Mixed Summer
- Squash - Mixed Winter
- Tomatillos
- Tomatoes - Heirloom and Cherry Mixed
- Tomatoes - Paste Mixed
- Tri-Colored String Beans

¹ Starting at ‘Basil’ read chart clockwise, legend corresponds from top to bottom.
GOALS IN ACTION: LAFARM OFF CAMPUS OUTREACH

- Moravian Academy
- Kellyn Foundation
- Newcomer Academy
- Nurture Nature Center
- The Seed Farm
- Penn State Extension Organic and G.A.P certification classes
- Buy Fresh Buy Local
- Green Apple Day of Service
- Green Woods Charter School
- Greater Easton Development Partnership
- Easton Urban Farm
- Lehigh Valley Association of Independent Colleges (LVAIC)
GOALS IN ACTION: LaFARM ON CAMPUS OUTREACH

- LEAP (Lafayette Environmental Awareness and Protection)
- SEES (Society of Environmental Engineers and Scientists)
- TREEhouse; a Lafayette Living Learning Community
- All fraternities and sororities in the Pan Hellenic Council at Lafayette
- Veggie Van Tech Clinic
- Green Building Club
- Lafayette and Lehigh Valley Food Forum
- Sustainability Committee
- Earth Day Committee
- Admissions and Our Beloved Community Event
- Bon Appétit Management Company and the Eat Local Challenge
GOALS IN ACTION: LaFARM ACADEMIC PARTNERS

- FYS 018 First Year Seminar
- EVST 100 Introduction to the Environment: A Systems Approach
- BIO 110 Edible Ethics
- EVST 310 Organizations and the Environment
- ENG 351 Environmental Writing
- EVST 373 Technology and Nature
- CE 390 and 391 Independent Study and Research

- CE 421 Hydrology
- 490 Various Capstone Projects
- Lafayette College Multidisciplinary Poster Projects

And Work on Special Projects with Departments and Programs in:
  - Engineering Studies
  - Civil and Environmental Engineering
  - Environmental Studies and Environmental Science
    - Art
SUCCESS!

- Drip Irrigation
- Production and Cover Crop Plan
- New Farm Manager
- Partnering with Bon Appétit Dining Services
A major accomplishment of 2013 was getting sustainable, potable water to LaFarm. This collaborative project included LaFarm, Art and the Department of Civil and Environmental Engineering Studies. Headed by Professor Brandes, its three components are: (1) design and installation of a water storage tank and surrounding sculpture made of found materials, (2) design and construction of an irrigation system using a well, solar pump, and the storage tank (CE 421 project), and (3) improvements to the nearby drainage swale to reduce flooding of the bottom corner of the garden, and to increase retention and infiltration of runoff (CE 421 project). Generous funding to support this project was provided by Art Hendrickson ’51 in memory of his grandson, Bryan C. Hendrickson, CE class of 2010.
Success! Maximizing Production with Crop Plan

Notable in 2013 was the move to maximize production at LaFarm through standardized garden beds that worked with the contours of Metzgar Fields. Weed pressure was a limiting factor in production so transplants seeded at an area greenhouse were used to get ahead of weed growth. Fighting erosion, breaking up compaction and improving the soil were all integral parts of this year’s garden production plan. With generous donations of greenhouse space, tractor time and otherwise costly cover crop seeds and the use of naturally derived 11% nitrogen soil amendments LaFarm was able to reconstruct 40 highly productive 5’ center beds (½ acre total) and 20 new permanent pathways. Winter killed oats and Lafayette compost were also used to start to combat weed pressure at the site. Legume cover crops were used selectively to fix additional nitrogen into damaged community garden beds.
SUCCESS! PARTNERING WITH BON APPÉTIT FOR SALES

2013 brought a new dining services team to Lafayette College. LaFarm began to plan and plant for summer vegetable sales in February. Bon Appétit Management Company stepped up to buy what was planted, cultivated and harvested when they came on board in June. With funding from Lafayette’s college-wide sustainability initiatives, LaFarm hired seven Lafayette students over the course of the summer, for a total of 40 hours per week of additional labor. With that labor and some additional volunteer hours we were able to harvest and deliver over one ton of fresh, naturally grown and heirloom vegetables to Lafayette College Dining Services.

6 Months of Harvest
1.15 Tons of Fresh Vegetables
832 Hours of Student Work
SUCCESS! MANAGER & LUDWICK FOUNDATION SUPPORT

In February of 2013 the LaFarm Advisory Board, lead by Professors Brandes, Brummel, Cohen and Mylon hired a full time LaFarm Manager and Metzgar Environmental Project Coordinator. This position was funded by the Provost’s office and the Cedar Tree Foundation in 2012 and was funded by the Ludwick Foundation for two more years starting in December of 2013. Sarah Edmonds came to Lafayette with eight years of farming experience, specializing in diversified small-scale vegetable production. The new Farm Manager earned a BFA and MFA, and has training in Good Agricultural Practices (G.A.P). Sarah has recently been recertified in G.A.P. food safety standards from Penn State University. The Farm Manager runs the working farm and community gardens at Lafayette and coordinates LaFarm’s branding, pricing, online presence, its programing and the compost and dining components of the Sustainable Food Loop.
Metrics: A Look at the Numbers

- Total Income: $4,450.60
- In-kind Donations Total Over $4,000
- Over $2,000 Dollars Invested in Tools, Equipment and Organic Fertilizer
Total Work Hours for 10-Week Summer Session: **832.25 Hours**

- 340.25 Hours: Volunteer Hours
- 450 Hours: Group Clean Up Events
- 17 Hours: Farm Manager-Sponsored by the Ludwick Foundation
- 25 Hours: Summer Hours-sponsored by Mitch Wein and Sustainability
Metrics: Total Expenses for LaFarm 2013

Breakdown of Expenses: $2604.79

- Chemicals
- Fertilizers and Lime
- Gasoline, Fuel, Oil
- Seeds and Plants
- Supplies
- Distribution and Harvest
- Equipment
- Field
- Greenhouse
- Hardware and Hand Tools
- Irrigation
- Member Events
- Straw
- Office Supplies
- Education and Conferences
- Marketing
- Service and Postage

Note: Starting at 'Chemicals' read chart clockwise, legend corresponds from top to bottom.
GROWING COMMUNITY IN 2013

- Special Events at LaFarm
- 35 Community Plots
- Partnered with Area Non-Profits Such As BFBL-GLV
- Featured in Articles, Lectures and the Lehigh Valley Local Food Economy Assessment
- 1841 Individual Newsletters Sent with 2858 Total Opens
- Partnered with The Seed Farm for Greenhouse Use
"The understanding of real food, where and how it is actually produced, is extremely important to the ability, desire and sustainability of attaining a healthy lifestyle. LaFarn is the perfect partner to reach the undergraduates at Lafayette, as well as other community members like children in local schools and YMCA summer camps, introducing them to the value and joy of locally farmed food."

Meagan Grega and Eric Ruth
Co-Directors Kellyn Foundation

"I was super impressed by what you have been able to accomplish at Lafayette."

Michele Merkel ’90
Co-Director, Food & Water Justice

"The flavor of local grown products is just superior to anything we would buy from a large-scale vendor. The items we get from LaFarn are either picked that morning or the night before we use them…. Within the first week of providing food to the school we had our first delivery."

Joel Blice
Bon Appétit General Manager
Growing Community in 2013: Overheard

“We are very excited to partner with LaFarm and feature your beautiful produce in the cafés.”

Alyse Festenstein
Midwest Fellow, Bon Appétit Management Company Foundation

“It’s important to know where your food comes from, and the farm is a perfect outlet for Lafayette to eat foods that are grown right here on campus.”

Nina Fisher ’14 As Quoted in “All About Flavor”
By Jess Silverman ’14 & Lia Peck ’17
The Lafayette, September 26, 2013

“LaFarm produce will now be sold to and served in the campus dining hall. LaFarm also incorporates a number of sustainable practices into its operations: food waste from the dining hall is turned into compost, which is used in the community gardens; pathways at the farm are being planted with perennial cover crops; and two 1,100-gallon tanks that collect rainwater run-off and a solar-powered well provide water for the farm.”

Lynn Prior
Lehigh Valley Local Food Economy Assessment 2013
Growing Community in 2013: Immediate Impact

In 2013 LaFarm rented out 35 community gardens to members in the LaFayette Community who wanted to grow their own fresh vegetables.

LaFarm donated weekly produce all summer to the Lafayette College Tech Clinic Veggie Van.

LaFarm hosted special events for community garden members and staff, most notably the Heirloom Tomato Tasting and our own Strawberry Festival.

LaFarm had eight ‘U-pick’ memberships available in 2013. Each member was able to pick beans, flowers, herbs, tomatoes, and peas throughout the summer.

In the last three months of 2013 the new LaFarm blog, sites.lafayette.edu, had 244 unique visitors to the site. According to Google Analytics each visitor spent about three minutes on the pages they viewed.

In 2013 LaFarm built a mailing list and sent out 1841 individual newsletters. Mailchimp, a free service, compiled statistics that reported 2,858 total opens on that mail.
Growing Community in 2013: Long-Term Impact

Joseph Ingrao

Majors: Engineering Studies and Asian Studies

“After working at LaFarm, I feel more clarified on what organic farming is and I understand Good Agricultural Practices. I have a broader foundation of experience to bring up in classes, and in general I believe that I am closer to my community. Most importantly to me personally, I know more about myself, and what I want to do with the future, as soon as this summer and as far as after graduation, and I know more about how I can structure my life to be happy and do as much for my community as I can.”

Julia Kripas ’15

Major: Civil Engineering

“I learned the effort that goes into cultivating our everyday food. Most people take for granted the variety of food that they eat every day and never stop to think about the farmer that might have been out sun up to sun down planting, weeding, pruning, and picking each ingredient that is in a simple meal. When you are actually a part of this process, you really start to appreciate the food you are eating and the farmers that labor unrecognized to provide necessities for others.”
Growing Community in 2013: Long-Term Impact

Peter Todaro
Major: Government and Law

“I wanted to work at LaFarm because I did an internship last summer at an organic farm in Upstate New York. I saw working at LaFarm as a natural continuation to keep learning about organic agriculture and to engage with a really awesome demographic within the Laf community!”

Benjamin Triscuit ’14
Major: Biology with a minor in Environmental Science

“To me, LaFarm represents a labor of love for the community…. Our work at the farm was certainly arduous, but I always left my shift feeling like I accomplished something of value. Every tomato plant we fertilized, every row of onions we weeded, and every pepper we harvested would benefit the community, whether it was the Technology Clinic’s ‘Veggie Van’ in Easton’s West Ward Neighborhood Partnership or Lafayette’s dining halls.”
2013 HIGHLIGHTS

- New Farm Manager hired
- Rebranded name and logo for ‘LaFarm, The Lafayette College Working Farm & Community Garden’
- New LaFarm blog: sites.lafayette.edu/lafarmblog
- New LaFarm website: garden.lafayette.edu
- Hiring of Bon Appétit as dining service contractor for Lafayette College
- Partnered with Bon Appétit dining services for garden vegetable sales
- Non-institutional donations for production totaling $3,212.00
- Above ground potable water irrigation system installed
- Campus composting reinstated
- Instituted harvest, wash and pack procedure for vegetable sales
- Cover crop plan and permanent farm beds and pathways established
- Ten year crop rotation plan for soil, disease & pest management
- Digitized invoice records for all LaFarm sales
- Worked with Green Building Club to build shed for the working farm
- New walk behind power scythe purchased for cover crop management
- Worked with The Seed Farm for use of heated greenhouse
- Automated production plan and seed order with AgSquared software
- Rented and maintained grounds of 35 LaFarm Community Garden Plots
- Offered pre-paid U-Pick crops for college community at LaFarm
- Attended ‘Organic Production Intensive - Farm Success’ conference
- Presented Small Scale Diversified Veg Rotations w/ AgSquared at ‘Beginning Farmers Learning Network’ sponsored by Cornell Small Farms Program
2013 Lessons Learned

- LaFarm soil needs substantial organic matter improvements and needs to go from its current 2% up to 5% - 7% over the next eight years.
- Weed and pest pressure at LaFarm is extreme and is currently hindering maximum production capacity.
- 2013 vegetable deliveries required approximately 307 miles of personal vehicle use over six months.
- Vegetable delivery, pack and wash needs require infrastructure improvements such as college sponsored transportation, permanent pack house with concrete pad, electric and refined wash facilities.
- LaFarm could plan for three-season harvest based on demand for LaFarm Produce from Bon Appétit.
- Three-season harvest requires fiscal support for infrastructure and staff.
- Our standardized production practices and high quality produce will support a small wholesale price increase.
- Tillage requirements exceed our current equipment; improvements in tillage will improve seed to soil contact, bare fallows, weed management and cover crop management.
- Storage needs are met, but any growth would exceed our capacity; rodent proof, all weather storage could house bulk seeds, seed starting equipment, specialized production equipment and season extending tools.
- Potable water for up to 1” of water per week, per acre is required.
2014 Goals

- Complete solar well, frost-free hydrant and holding tank for irrigation
- Build and connect wash station into new well
- Develop 2, 5 & 10 year Strategic Plan with LaFarm Advisory Board
- Submit grant application for high tunnels/hoop house
- Develop written food safety plan
- Fill out BAMCO Food Safety Guidelines for the Farm to Fork enrollment
- Run quarterly water quality tests
- Run annual compost quality tests
- Perform food safety self audit
- Establish 50 foot conservation buffer along south/southwest fence line
- Continue to uphold high vegetable production standards
- Coordinate efforts with Tech Clinic Veggie Van project
- Continue to build connections with on and off campus community
- Implement Good Agricultural Practices training
- Pest management plan and LaFarm Community Garden pest report card
- Weed management plan and LaFarm Community Garden report card
- Write LaFarm Community Garden Handbook
- Establish perennial plots for herb, small fruit and asparagus production
- Attend PASA ‘Farming for the Future’ Conference
- Maintain and increase fruit tree production
- Increase double crop cover crop in all active production areas
Thank You

Very special thanks goes to all of these folks who have helped LaFarm and the Lafayette College Sustainable Food Loop get good food growing at Lafayette in 2013!

- Lafayette Sustainability Initiatives
- Department of Civil and Environmental Engineering
- Mitch Wein
- Offices of Finance and Administration
- Kari Fazio
- Summer 2013 Student Workers
- Bruce Ferretti
- Jennifer Bell ’11
- Bon Appétit
- The Hendrickson Family
- Professor David Brandes
- Professor Art Kney
- Program of Engineering Studies
- Professor John Wilson
- Professor Rachel Brummel
- Professor Benjamin Cohen
- Professor Steve Mylon
- Katie Schimpf
- Community Garden Members & Core Group