Duke Campus Farm’s
STARTING A FARM: OUR EXPERIENCE AT DUKE UNIVERSITY

The following are excerpts from Molly Johnson’s senior thesis, submitted to Duke University’s undergraduate program in Environmental Science and Policy in April, 2013. Professor Charlotte Clark, a member of the Duke Campus Farm Advisory Board, served as Johnson’s advisor. See Johnson’s comprehensive work here.

SETTING PRIORITIES AND OBJECTIVES
Farm in different areas founded under different institutions will have varying objectives. The Duke Campus Farm was initially funded in part by Duke Dining and in part by Sustainable Duke. The farm has therefore been established as a production and educational, dual-mission, campus farm. The DCF has had a difficult task, as do other campus farms, of balancing the two sometimes competing missions of education and economics. Educationally, Duke’s campus farm fosters a learning environment for students and aims to provide both experiential and academic offerings around food issues. The DCF also strives to provide increased access to and consumption of local, sustainable and student-grown food on campus.

FORMING A BUSINESS PLAN
The Duke Campus Farm’s initial business proposal, conceived by an independent-study student alongside the soon-to-be farm manager, covered the following topics: an introduction explaining motivations behind starting a campus farm; a list of the other students, professors, and mentors dedicated to starting the farm; the goals of the farm, how they will be monitored, and how to measure their success; a study or demonstration of the need for a campus farm and who it will be serving or selling to; potential stakeholders, their roles, and any materials, funds, or other resources needed from stakeholders; land proposition and a rough plan for development of the land (structurally); field layouts and potential crops to be grown; financial outlooks to start the farm (divided into land, seeds, soil amendments, equipment, structures, employees) and for a few years following its establishment; the risks involved in starting the farm and preventative and remedial actions that will be taken.
The plan has evolved over time, but the initial proposal was crucial in lobbying administration and important stakeholders to join the effort to build a campus farm.

WORKING WITH UNIVERSITY PARTNERS

Getting administrators on board is crucial to any farm’s success. Lee Miller, former intern at the Duke Campus Farm, says it was important to get administrators to “recognize that a farm gives so much more than access to fresh local produce. It gives boundless educational opportunities; it’s a boon for public image and recruitment; it’s an outreach tool to the broader community. As such, it deserves the institutional and financial support commensurate to all that it has to offer.” DCF found that laying a foundation of administrative backing -- earned by many months of meetings and proposals -- can help make the process for gaining the subsequent offices’ support easier.

Partnering with Campus Dining

At Duke, the campus farm initially obtained a written agreement in which Duke Dining would pay for and receive all of the farm’s products during the academic year. This deal not only provided the farm with a defined income, but also made it easy to settle distribution: all products go to one place. One reason that Duke Campus Farm could sell its produce to the dining program is because its service provider is Bon Appetit, a company that has sustainable and local food policies ingrained into its business model. One such policy includes the requirement of having twenty percent of food or ingredients sourced locally, however, this policy did not make it exceedingly easy for the farm to become an approved vendor for Bon Appetit. The DCF had to obtain and fill out six different forms, and must adhere to strict guidelines for each step of production, harvesting, and delivery. During periods when students are not around, or “shutdown” periods, the DCF can sell its produce at the Duke Farmer’s Market and through its CSA during the summer months. The farm is now changing its relationship with Duke Dining so the farm can expand its business outside of Duke’s walls.

Partnering with the Sustainability Office

Sustainable Duke helped the Duke Campus Farm get off the ground in many ways, starting at its inception in an undergraduate class by posing the question “Should Duke have a campus farm?” From, there the office was interested in the provision of local produce to campus eateries and the experiential learning students could take part in when visiting and working on the farm. At first, it funded a summer research internship into the matter, and later employed the farm manager part-time. Casey Roe, a Sustainable Duke program coordinator, helped the DCF farm manager gather the key stakeholders to determine the farms logistical details. These players jointly decided that Emily (Sloss) would transition into a full-time position as farm manager, half funded by Sustainable Duke and half funded by Dining and Bon Appetit. Currently, the farm manager meets with Sustainable Duke on a weekly basis.
to address challenges and talk about events, management, and relationships with other stakeholders.

**Partnering with the Forest/Grounds Office**

The Office of the Duke Forest is the entity that manages Duke University’s seven thousand acres of land that are dedicated for teaching and research purposes. Although the plot on which the Duke Campus Farm now stands was originally purchased for separate research purposes, with the help of the Duke Forest’s Resource Manager, Judson Edeburn, the farm manager was shown two different available plots including the one chosen. When asked how she would advise other institutional land managers who are approached by students looking to start a campus farm, Sara Childs, the Duke Forest Program Director, responded that “as much as possible, try to fully understand the farm endeavor’s goals, production methods, and long-term expectations so that the most appropriate site can be chosen.” The farm manager explains that she chose one over the other because of the difference in sunlight and space.

**Securing a Consumer Base**

As all food vendors and farmers know, it is the consumer base that can determine the success or failure of their entity. The Duke Campus Farm established a strong connection to university dining from the start, but the farm soon knew it wanted to reach customers beyond campus dining halls.

**Community Supported Agriculture (CSA)**

CSAs are a model in which the vendor sells shares of the farm’s produce at a predetermined rate at the beginning of the season. The farm receives payment up front and holds consistent distributions at a set time and location. Duke uses the CSA model only during the summer months, as it has all of its produce paid for in advance and used by Duke Dining during the academic months. The Duke Campus Farm keeps careful logs of the produce harvested and provided to their customers. DCF also includes short newsletters in the members’ boxes each week which include an update of the farm happenings, a list of the produce customers are receiving, and a couple of recipes that match the included products.

**Campus Dining**

As discussed above, incorporating the dining program into DCF’s consumer base has been a great way to spread awareness and a taste for local, sustainable food among students. As Duke Campus Farm’s fellow points out, “diversity in finances is just as sustainable as diversity in your crops” which means that having multiple sources of revenue can help guard against financial instability. Selling goods to the institution’s dining company means dealing in wholesale prices, which reduce overall income for the farm. Creating a diverse revenue stream --- comprised of both wholesale and retail customers --- is moving the farm in a positive and stable direction.
Farmers’ Markets
The Duke Campus Farm pioneered in 2012 an effort to sell at local farmer’s markets. The farm began selling at Duke’s own campus farmer’s market (outside Duke South Hospital) and has enjoyed broadening its customer base to include more employees and students. Selling at larger city markets can often be competitive and farms must consider the various certifications and qualifications that give them competitive edge in larger market settings.

FARM MANAGEMENT
At Duke, the farm manager is responsible for the majority of the work on the farm and organizing interns and volunteers. The farm hired its first Farm Fellow in 2012, funded through a grant from The Duke Endowment, and the 2013-2014 fellow begins work in July 2013. In addition to helping the farm manager with day-to-day operations, the fellow focuses a significant portion of time on educational outreach.

Staff
The Duke Campus Farm hires about three interns per school year (2 undergraduate and at least one graduate student) to help with events, day-to-day farm upkeep, and outreach tasks. Duke’s campus farm is able to hire interns through the university and/or federal work-study programs and also employs one intern through a “research assistant” position. These options are valuable for any campus farm, as they lessen the financial burden of the farm while still obtaining the stability of paid interns.

Volunteers, Outreach & Awareness
The Duke Campus Farm works hard to promote its mission to students and the wider community. To maintain the full working and educational mission often takes more than just a manager, fellow, and interns. DCF relies on volunteers to complete big projects and to join in for meals and community events. The farm hosts weekly workdays where any person can contribute and enjoy the sense of community fostered at DCF.

Education through Classes and Labs
Although Duke does not yet have courses offered at the Duke Campus Farm, it does have a multitude of courses offered relating to food, food policies, health, and sustainability in many different departments. Several diverse professors at Duke also use the campus farm on a semester basis to educate students; whether to take a tour, volunteer their time, or even use the farm for photography shoots. To date, the farm executes its educational role primarily through workdays, workshops, and tours. The Duke Campus Farm is currently working to incorporate more academics on the farm through a potential university-sponsored certificate in Sustainable Food Systems.

Tours
Tours can serve as a crucial introduction to agriculture for people who have never set foot on a farm, or else as a learning laboratory for folks learned in the field. The Duke Campus Farm happily offers tours to groups of all sizes and kinds, both affiliated and not affiliated with Duke University or formal community organizations.

**Workshops and Events**

Using workshops as an educational tool is a great way to engage with stakeholders, students, and community members. The Duke Campus Farm has hosted a number of workshops since its founding. These have included everything from mushrooms, to kimchi & kombucha, to medicinal herb use.

**MARKETING AND ADVERTISING**

In addition to a website that contains both static information and an updated blog, The Duke Campus Farm uses two popular online platforms to share news, photos, and general farm on-goings: Facebook and Twitter. The platforms allow the farm to connect with current students, alumni, and community members and organizations. In addition to spreading its presence online, DCF was even featured on the sides of one of Duke’s buses, which travels between the two main campuses, East and West.

**RECORDS & REPORTING**

The Duke Campus Farm works hard to document its plans and processes. From seed orders and crop rotations to hiring interns and building its outhouse, DCF tries to write it all down and share the information among its core group digitally via Dropbox. Quarterly and Annual reports have been a staple product from DCF and have served as hugely useful tools when working with the farm’s many university stakeholders. The entire staff cannot emphasize enough: keeping track of what you do and how you do it saves much time and energy in the long-run. Good record-keeping improves the professional nature and appearance of the farm.

*For more information about starting a farm, from identifying objectives and scouting land to building curriculum and a customer base, see Johnson’s full text here. Johnson's full research provides readers a step-by-step overview of Duke Campus Farm’s founding, in addition to a comparison between DCF and peer farms’ policies and practices.*