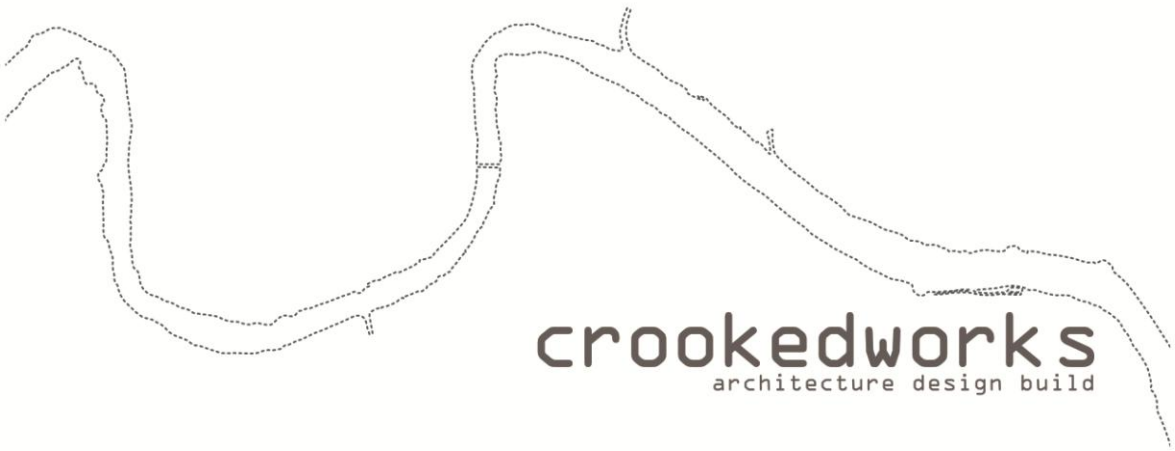

In New Orleans, a post-Katrina landscape offers up abandoned and underused land for food production. Vacant lots, some thirty thousand already seized by the New Orleans Recovery Authority for redevelopment, are logical opportunities for the extension of greenspace in the city. The resurrection of the Victory Garden concept within this new landscape fits neatly into the New Orleans Recovery model, while simultaneously repairing the disconnect between farm and table.

Covenant Farms brings urban farming to the 6th Ward, while promoting urban infill, vacant land repurposing and green jobs for at-risk youth. Covenant Farms introduces students to urban farming through the work of hands-on gardening and a paired curriculum focused on food justice. Using several donated lots in the 6th ward, students have cleared, planted, cultivated and harvested edible crops.

Because Covenant House has already acquired six sites, with another five in process and plans for even more, the construction plan has been designed with a flexible kit-of-parts approach. Each garden contains the same raised beds, compost bin, work surface, and water source, but these units become organized according to site-specific factors. Additionally, some of the supports for these gardens can be optimized and shared. One centrally-located tool shed, for instance, accommodates the needs of multiple sites, and a single chicken coop may prove sufficient for the entire project.

Covenant Farms has five functioning gardens up and running, with plans for more gardens over the next year. Students benefit from green job training, while neighborhood blight is getting transformed into productive agricultural and civic space.

Food Security in New Orleans

In 1943, Americans planted over 20 million Victory Gardens, and that harvest accounted for nearly one third of all the vegetables consumed in the country that year.[1] Today, fresh food follows a much more circuitous path, resulting in

[1] http://www.revivevictorygarden.org/

increased preservatives, transportation costs and cultural uniformity. This disconnect particularly penalizes the poor, who are both more likely to live in food deserts and can't afford to pay the high price of imported perishables.

The situation for young people is even worse. According to the State Indicator Report on Fruits and Vegetables, fewer than 10% of the youth in grades 9 through 12 were meeting dietary recommendations in Louisiana.[2] Compared to other regions in the U.S., youth in the South struggle with overall health and food access, factors that ultimately undermine student performance.

Fresh, local food is also a central fixture at the Covenant House in New Orleans. Here, young people between the ages of 16 and 21 receive shelter, education, job training, counseling, clothing, childcare, medical attention and an opportunity to repair their lives. With an average of seventy-five students in residence at the Covenant House daily, wholesome and sustaining meals have become the core for this critical support.

Vision

While the New Orleans Covenant House shares common values with national partners, the organization has developed a set of site-specific strategies for youth training. White Dove Landscaping and the Covenant Café teach students real-world job skills under a proven social entrepreneurship model. Covenant Farms will build upon these two existing job training programs, linking landscape to kitchen through food production. Although real goods and services come out from these three initiatives, the primary focus of each program is on youth development.

Students will learn gardening skills through a curriculum provided by the New Orleans Food and Farm Network, and they will hone their skills through hands-on practice and experiential education. By necessity, students will address a wide range of issues, including soil health and toxicity, responsibility and follow-through, and how to create a marketable final product.

Covenant Farms will prepare students for the growing number of green jobs in today's market. These skills represent cutting-edge techniques and a new set of industry standards. At the same time, the gardening expertise learned at Covenant Farms can be considered part of a body of life skills that leads to self-sufficiency for each individual.

Design Concept

Because this project involves multiple lots, the development of Covenant Farms will occur incrementally over time. Each lot provides a different set of design conditions, including soil quality and solar access, size, shape, neighborhood context, water availability, and proximity to the Covenant House. As the program grows, planting trends may change to accommodate shifting needs.

Because New Orleans is located in the hot and humid south, Covenant Farms will be able to operate year-round with uninterrupted produce yields. Its location Zone 9 offers a variety of options for fruits, herbs, vegetables and flowers. Initially, Covenant Farms will begin with two dedicated herb gardens, with additional plots producing flowers, seedlings, heirloom vegetables, fruit-producing orchards, eggs and even honey.

[2] U.S. Centers for Disease Control and Prevention, State Indicator Report on Fruits and Vegetables, 2009.

Regardless of the lot type, site circulation must allow for universal access and work efficiency. Raised beds, built high off the ground with a wooden border, allow for this access while also separating new soils from the ground. These beds will provide a clear organization for the garden, and ensure that toxins on site don't get transferred to the dinner table. Logical and intelligent planting relationships, such as companion planting, will be taught through the program.

Fences and perimeters will also to help delineate space for each of these individual garden lots. Because each of these gardens is literally woven into the existing fabric of a historic residential neighborhood, there must be some sort of perimeter identified. While low fences won't prohibit entry, they will help to keep animals out and generally deter vandalism. These fences, combined with signage, will help to shape a shared identity among the disparate Covenant Farm lots.

Project Organization

The Covenant Farms project will have four core steps: preparing the lot, planting, growing and harvesting. Each lot will move through these phases, and ongoing maintenance and planting cycles will continue as the program develops. Each of these four steps offers unique learning opportunities, and will need to address the following issues:

Preparing the Lot: This part of the process involves real estate acquisition, insurance, the identification of useable lots, the negotiation of tenure, ownership or lease, and the physical removal of material from the site. Students will engage in soil tests and the preparation of raised beds. If the site needs utilities, fencing or livestock areas, they will be constructed on the site. Any sustainable features, such as rainwater cisterns or site drainage, will be built. This step is a critical one for the project; with better preparation on the front end, the sites will need less maintenance for weeding, watering and soil care.

Planting: Anticipating market demand, students will identify an optimal planting scheme for each lot. This may include themed gardens, or educational collections, or perhaps simply an efficient farming response to the conditions of the site.

Growing: Garden maintenance is the key component of a successful program. In addition to watering, regular weeding, pest management and soil fertilization will be necessary. Recgonizing that there will be unforeseen challenges along the way, a horticultural consultant will be assigned to each garden to assist in monthly troubleshooting. Each lot will need roughly 20 person-hours per week, with site visits ranging from daily to every three days.

Harvesting: Harvesting must also occur regularly, in order to ensure productive yields and fresh produce. A plan for the delivery and dissemination of garden produce must be tied to the harvesting process. Because food security begins at home, Covenant Farms will feed itself first. Students will make the connection between the farm and the table, cooking and eating their own meals.

Beyond these four skills, Covenant Farms will incorporate signage in each of the gardens to educate and inform visitors. This clarification, along with more personalized community outreach, will help to garner community support for this work. Covenant Farms may engage volunteers and allies from time to time, either for a large-scale work day, or community celebration, or perhaps neighbors to look out for the gardens after hours.

Phasing

The first phase involves clearing, preparing and planting the first two lots, located at 2213 Orleans Avenue and 816 N. Galvez Street. These narrow lots will provide just enough space for long raised beds, a composting system, and several work spaces. Because the lots are relatively small, they will both be used as dedicated herb gardens, with interspersed flowers and trees designed to attract pollenators. The fences in each case will need to be augmented and repaired, and a front planted fence will include signage to identify the farm.

Some of the built components on these first two lots can be added over time. The large tool shed at Galvez St, for instance, may be constructed well after the gardens are underway. These building projects may provide students with unique opportunities to engage in the design and planning of their own space, allowing them to leave a lasting imprint on the more transient garden landscape.

Before beginning the second phase, and evaluation and reflection period needs to occur to critique these first two lots. At this point, students, staff and educators will participate in focus groups to identify any challenges or opportunities for future development. Production goals and an assessment of the work completed will be analyzed. Finally, follow-up soil testing will help to show any changes in contaminated areas.

The second phase includes clearing, preparing and planting the remaining four lots that have already been acquired, located at 823 N Claiborne, 313 N Johnson, 413 N Johnson, and 312 N Roman. These gardens will include a fruit-producing orchard located at the large lot adjacent to the freeway on N. Claiborne, as well as three vegetable farms on the other lots. Although the orchard will take up to three years produce fruit, a continued supply of herbs and new seasonal vegetables will begin to create great volume for Covenant Farms.

Any learning from the first phase will be integrated into the second phase, as a way of developing a long-term sustainable farm network.

The third phase includes clearing, preparing and planting the final five lots, which have been dedicated through long-term leases rather than ownership. The logistics of this tenure must be addressed before beginning construction, as well as other development requirements, such as necessary site surveys. These lots will contain vegetables, fruit, flowers, and seedlings as needed. At this point the learning curve associated with gardening and teaching will have leveled, and animals, such as chickens and bees, may be introduced.

Sustainability

Sustainable farming practices not only protect the longevity of the program, but they also provide a timely and useful set of skills for students preparing to enter the green job market. Students will get first-hand experience with the environmental stewardship of these sites, and they will quickly witness the cause and effect of their nurture and response.

At a large scale, urban farming environments contribute to health by reducing food miles, and providing much-needed fresh food in urban communities. Because they are inherently flexible and non-permanent, gardens can be used as a place-holder through time, supporting healthy, connected neighborhoods while recognizing this shrinking city's need to reduce density. If the population of New Orleans grows dramatically in the future, these lots could once

again become sites for building. Looking at these pocket gardens as a rebuilding strategy is particularly important as a land-use and urban development measure in the resurrection of productive landscapes.

These gardens will respond directly to the sustainability of food culture and New Orleans history. Rather than using native plants, students will identify and cultivate the important components of New Orleans cuisine, or crops that are familiar to people here. Gumbo herbs, okra and collard greens, and Louisiana citrus or pecan trees are the types of hardy growers that should perform well in this climate, while sustaining local food culture.

The gardens also support sustainable urban living by increasing habitat in the city for animals, birds, bugs and bees. Specific plants can help to detoxify the soil over time, gradually removing heavy metals from the ground. Shade from large bushes and trees may help to improve thermal comfort on sites and for surrounding neighbors, and assist in mitigating the urban heat sink phenomenon.

Additional built features will also aid in the sustainability of the garden lots, primarily by reducing the carbon footprint required to grow food in a city. Rainwater catchment and reuse can save thousands of gallons of tap water each year, along with money and energy. On-site power generation, in the form of small wind turbines or photo-voltaic cells, may help with lighting or other power needs. These additional features may prove cost prohibitive unless donated or hand-built.

Partners
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The New Orleans Food and Farm Network

The Covenant House

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