

URBAN FARMING: STRATEGIES FOR COMBATING FOOD INSECURITIES IN SCHOOLS EAST HIGH SCHOOL



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Project Brief

Profile of Organization

Green Acres Urban Farm & Research Project is a non-profit organization with strong ties to the urban community. Founded by the visionary Carol Coe in 2009, Green Acres was ahead of its time in the AG space. The vision and mission of the organization are rooted in the philosophy of George Washington Carver, who wanted poor farmers to grow alternative crops both as a source of their own food and as a source of other products to improve their quality of life. Carver wrote, "The primary idea in all of my work was to help the farmer and fill the poor man's empty dinner pail. My idea is to help the man farthest down." He went on to say, "How far you go in life depends on your being tender with the young, compassionate with the aged, sympathetic with the striving and tolerant of the weak and the strong." These are guiding principles that permeate the culture of Green Acres Urban Farm and Research Project.

The mission is to create a sustainable community infrastructure to provide resources that improve the quality of life of its members. Among these resources are exposure to science, technology, engineering and math by building and maintaining aquaponic/hydroponic systems, research and development of renewable energy sources, earning a living wage, the provision of locally sourced, organic, nutritious food, and dietary education. The execution of the mission involves the utilization of two 30' x 60' greenhouses, located on the campus of East High School, as the base for the sustainable infrastructure. The students that participate in the program will become conduits to their community through which all resources flow.

Project Overview

The challenge before us is to create an Ag-Business model that is both sustainable and capable of mitigating food insecurity. Green Acres' stance on food insecurity is that access to food is only a small part of a much more all-encompassing problem. As such, through research and development we will devise a holistic approach to combat food insecurity on five primary fronts:

- Education - Develop a curriculum tailored to transferable skill sets that impact the quality of life.

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- Exposure - Gain exposure to and assist in the development of emerging technologies, renewable energy sources, horticulture, aquaculture, design, fabrication, marketing, and business.
- Connections - Connect with community leaders and entrepreneurs that want to help you succeed.
- Finance - Create a sustainable ag-business model cable of paying students a living wage.
- Serve - Give back to the community by providing high quality nutritious produce seeded, harvested, and packaged by students of the community.

Project Plans

EDUCATION	<ul style="list-style-type: none"> • DESIGN AND FABRICATE AN AQUAPONIC SYSTEM ATTACHED TO AN EXPANDED CLAY MEDIA BED. • FABRICATE STANDS AND INSTALL FILTRATION SYSTEM AND PLUMBING FOR PRAWN GROW OUT TANKS • AQUAPONICS/HYDROPONICS & AQUACULTURE 101 • LIVE SOIL, MICROGREENS, AND MUSHROOM PRODUCTION • GREENHOUSE MAINTENANCE • NUTRITION BASICS
EXPOSURE	<ul style="list-style-type: none"> • EMERGING AGRICULTURE TECHNOLOGY • EXPERIENCE OF GROWING PRODUCE FROM SEED TO HARVEST IN A VARIETY OF MEDIUMS • PLANNING AND FACILITATING A COMMUNITY SOCIAL EVENT • FEEDING THE COMMUNITY • COOKING PRESENTATIONS AND RECIPES
CONNECTIONS	<ul style="list-style-type: none"> • 4-H CLUB • COMMUNITY LEADERS • GUEST SPEAKERS • MENTORING
FINANCE	<ul style="list-style-type: none"> • STUDENTS WILL BE PAID A STIPEND FOR THEIR WORK • THE PROJECT'S INITIAL FUNDING WILL COME FROM GREEN ACRES GRANTS AND DONORS, EAST HIGH SCHOOL, AND CORPORATE PARTNERS. • THE ONGOING PROJECT WILL BE FINANCED BY INCOME GENERATED THROUGH THE SELLING OF PRODUCE
SERVE	<ul style="list-style-type: none"> • PRODUCE GROWN DURING THE INITIAL PHASE OF THE PROJECT WILL BE DONATED TO THELMA'S KITCHEN, AFTER THE HARVEST, HOPE FAITH KC • THE SECOND PHASE OF THE PROJECT (POST CONFERENCE) WILL BE TO EVALUATE THE RESULTS FROM OUR RESEARCH TO DETERMINE BEST AGRICULTURE AND AQUACULTURE PRACTICES TO FEED THE STUDENTS AND FAMILIES OF EAST HIGH SCHOOL

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Audience

We are painfully aware that food insecurity is closely tied to wellness, and to the availability of healthy food, disproportionately affecting those in low-income communities (1). Food insecurity, or a lack of secure access to sufficient amounts of safe and nutritious food for an active healthy life, and normal growth and development, is a result of limited food availability due to inadequate physical access to food (in other words, food deserts), limited economic access to food (namely, poverty, or high food costs), inadequate utilization (for example, lack of kitchen or household facilities for food preparation, or challenges in meeting the costs of living in a way that adequately addresses food needs), or a lack of stability in one's environment or income, further disrupting physical, economic or utilization capacity. The student & family demographic of East High School is 92% Black and Hispanic, with low to moderate income, and residing within the boundaries of a food desert. A combination of all the above factors makes the students and families of East the perfect audience for our project.

Not only does Green Acres believe that our students are conduits to their community, but they are also the architects of our future landscapes. As such, the benefactors of our body of work will first and foremost be the students. The goal is to enrich the lives of the students through education, exposure, connections, finances, and access to locally sourced organic food. By enriching the lives of the students, the project can organically impact their families through resources provided. The connections made with families will in turn serve as a means to connect community members to work together in the battle against food insecurity.

Our motto will be "If we grow the healthiest food on the planet, and don't lift a finger to help grow healthy neighbors and communities, our work is in vain."

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