



## **Bethune-Cookman University**

**Daytona Beach, Florida**

**Farming/Gardening**

### **SCHOOL**

Bethune-Cookman University, private, 4 year, 3,600 students, Daytona Beach, Florida

### **ABSTRACT**

There are many opportunities for a college or university to engage with its local community to bring about positive change. Bethune-Cookman has worked with a local charter school, the Chiles Academy, to provide its students an opportunity to learn about the value of fresh, organic food and how to grow it. Currently the garden has twenty plots that have been made available to the community, ten for the school's kitchen, and open fields for expansion. This project was started with no funding but through support of volunteers from the community the garden is equipped with tools and continues to grow.

### **GOALS AND OUTCOMES**

#### **Goals**

When the project began in January 2011, the primary goal was to engage with the neighboring community to become gardeners. Within the first year, we wanted to have all thirty plots be claimed and managed by neighbors of the school or students from the Daytona Beach schools. In the next few years the garden is planned to expand and grow, incorporating different aspects of urban agriculture such as livestock or hydroponics and to become self-sufficient in terms of funding and soil amendments.

#### **Accomplishments and Outcomes**

In the first spring growing season of the garden, we mostly achieved our primary goal. All thirty plots were taken, planted, and managed for the entirety of the spring. We did not however have participation from neighbors of the school. This was the group we wanted most to engage with, as it is disadvantaged community amidst a food desert. Attempts were made to engage with this community by engaging with local ministries and social groups, but these proved ineffective. The assumption is, the garden project is new and being run by people from outside of the community. If given additional time and continued engagement, we may have more members from this immediate community.



Our long term goals also had progress, with guidelines being developed for beehives, a functioning composting system, and donations to supply the garden. With a partnership with the local beekeeping society, master gardeners program, and local organic farmers the garden has a wealth of information and gardening support that helps novice gardeners start. The composting system makes use of the food scraps from the school cafeteria and donated leaves/mulch from local landscaping companies to produce soil amendments to improve the sandy and nutrient poor soil. Lastly the community members we have engaged not only donated their time to the garden but also provided tools, plants, and money to ensure the project will continue.

The moment the garden flowered, we could see immediate changes in the local wildlife. Besides attracting pollinators, pests, and their predators (predominantly insects) to the garden, migrating birds and a diverse reptile population have also made use of the garden. This has provided many opportunities to educate the gardeners, students, and teachers of Florida native animals and other visitors.

### **Challenges and Responses**

The single largest challenge the garden faced was continued support from the many groups involved in the garden. Each participant had reasons why they may be unable to maintain commitments, whether it is a family, school assignments, or a long day at work. These problems were mostly overcome by using alternates or varying the planting in their bed. When a person or group joined the garden, they were required to sign an agreement that established how much attention the garden must receive. Part of this agreement was encouraging them to reach out to fellow gardeners and collaborate on the planting and maintenance of their garden beds. Or if someone knew that they would be unable to spend enough time, they would work with one of the knowledgeable gardeners to plant vegetables that could fend off weeds or survive a drought.

The seasons also proved to be a challenge, with the summer heat keeping many of the gardeners indoors. There is no obvious and easy fix to this problem other than letting the beds go fallow during the summer. Certain summer plants such as peppers or beans were planted because of their ability to survive without a lot of attention.

### **Campus Climate Action: Your School's Carbon Footprint**

The garden project focused primarily on education of its participants on the virtues of homegrown organic food. Through this approach, topics such as the contribution of conventional agriculture to global warming were addressed. With this new knowledge, gardeners were more likely to purchase organic foods or even shop at the local farmer markets. This resulted in smaller carbon footprints and in conjunction with the compost program that saves food scraps from going to the landfill, the project has resulted in a very small decrease in emissions. In the future these thoughts will be addressed in a more quantitative fashion, through surveys and interviews.

## **ENGAGEMENT AND SUPPORT**

### **Leaders and Supporters**

The project was started in the winter of 2010 with Joel Tippens, owner of the not for profit organization Salt of the Earth, contacting the director of the Chiles Academy Anne Ferguson. They organized the framework for the garden project and broke ground by organizing a work day to dig the thirty garden

beds. Andrew Kameronosky, graduate student at Bethune-Cookman University then took on the position of garden manager in the spring of 2011. He was supported by the staff of the Chiles Academy along with several community members from the Lions Share Community Garden. Embry-Riddle, Daytona State, and Stetson University students and faculty were also of great help in providing volunteers and gardeners for the project.

### **Funding and Resources**

The project was completely supported by donations of time, material, and money from the volunteers and gardeners. To start and maintain a garden, it does not require much. There are many low/no cost methods that when presented to our motivated groups resulted in progress for little funding. As the Chiles Academy embraced the project fully, space for the garden was never a concern. I was supported by a NWF Campus Ecology Fellowship, but no funding was used for this project.

### **Education and Community Outreach**

The entire project was aimed at engaging the Daytona Beach communities with organic gardening. By working with diverse groups, the gardeners were able to experience a full range of techniques and disciplines. By involving the colleges and schools of Daytona Beach in addition to community groups, a broad swath of the area was engaged.

### **National Wildlife Federation's Campus Ecology Program**

**This project was supported through a NWF Campus Ecology Fellowship.**

### **CONTACT INFORMATION**

#### **Contacts**

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**Case study submitted by:** Andrew Kameronosky

### **MORE ABOUT YOUR SCHOOL**

#### **Campus Sustainability History**

Bethune-Cookman University is expanding its sustainability programs on campus to involve and educate its campus and local communities. Some examples of projects are a two stream recycling program, an ice powered AC system that makes use of off peak electricity, and an award winning environmental student group Students Interested in Free Enterprise (SIFE). With the creation of an Environmental Science major and founding of a chapter of the Integrated Environmental Association (IEA) honor society, campus sustainability efforts will be taking off in the next few years to include a campus garden program, installation of solar PV, and many other programs to green the school.

**Image credit:** Andrew Kameronosky