

SHARE THE FRUIT:

AGROFORESTRY
FOR RESILIENT
AND EQUITABLE
COMMUNITIES



Baton Roots
Community Farm at Howell Park



SHARE THE FRUIT:

AGROFORESTRY FOR RESILIENT AND EQUITABLE COMMUNITIES

FUNDING PROVIDED BY:



STAFF AND SUPPORT PROVIDED BY:



EXECUTIVE SUMMARY

Share the Fruit is an engaging community driven agroforestry program that can be used to address food insecurity, Urban & Community Forestry knowledge, environmental inequity and resiliency in underserved communities. This is achieved through the organized establishment of agroforestry orchards within communities using existing community assets. The STF program serves as an excellent case study for state agencies and non-profits looking to increase community engagement, contributing to community resiliency and self-sustainability.



PRESTON BROOKS

Agroforestry Equity Coordinator, Baton Rouge Green
2241 Christian St.,
Baton Rouge, LA, USA, 70808

SOCIAL VULNERABILITY & FOOD INSECURITY IN DEVELOPING COMMUNITIES

An underserved community is typified by disparities in public and/or private resources, resulting in numerous social issues that negatively impact its population. Issues such as environmental inequity, social vulnerability, lack of resilience, and food insecurity are some prime examples. These issues are especially hard because of their compounding consequences. Food insecurity is a direct result of poor investment in the community. Fresh fruit and vegetables are not produced locally within the community and the fresh produce that is available is too expensive and/or at inaccessible distances from these communities. Additionally, grocery stores and farmers markets do not establish locations commonly in these communities causing these underserved communities to become **food deserts**.

The most reliable and secure source of food is the food one produces. Community gardens, farms and public trees are excellent sources of self-sustaining food for these communities and thus establishes itself as an obvious choice for improving underserved communities. One of the biggest hurdles, however, is the knowledge and stewardship needed in these communities in the establishment, management and

prosperity of such programs. Trees represent an important, low-maintenance, high-production food source with well-established practices for Urban and Community Forestry (U&CF). Trees also serve many other community and ecological services to communities such as stormwater mitigation, pollution control and urban heat reduction thus contributing to environmental equity for communities where they are planted.

Baton Rouge Green, a local non-profit and hub for Louisiana Community Forestry, along with BatonRoots (a Walls Project initiative) started a pilot project to establish a fruit production program through the education and stewardship of underserved communities in East Baton Rouge Parish in Louisiana. The unique approach of this program was the concerted effort of engaging communities personally and then educating, and stewarding them in urban agricultural and forestry practices that allowed the residents to grow much needed food for themselves and take the steps they need to **move from food desert to food forest**.



THE STF PROCESS OUTLINE:

1. Community Engagement
2. Surveys
3. Planting with Local Volunteers
4. Orchard Planning
5. Educational Outreach
6. Management
7. Benefits of the Program
8. Outcomes
9. Next Steps

THE “SHARE THE FRUIT” PROJECT

Share the Fruit’s (STF) mission is to establish functioning community orchards in underserved communities using proven community agroforestry management practices and existing assets. This project is designed to be easily scalable, it may be replicated within regions with little to no adjustment. Nationally, this project and workflow may be used, at any scale, anywhere fruit trees can establish well.

The project involved the organized establishment and stewardship of small, medium and/or large fruit trees combined with the distribution networks and harvesting capacities of existing community agricultural assets. Located in East Baton Rouge City Parish, it targets underserved communities mainly represented by the housing authority communities.

A crucial part of STF is that it is a community-driven program. While expertise guided the program, the community had a choice in deciding what to plant through surveys, community dialogue and interaction. The community also played an active role in managing their orchards by helping water, mulch and prune the trees on a regular basis. This sense of ownership in these communities helped establish strong participation that ensures growth and continued engagement of residents for the future.

STF was implemented in eight of the East Baton Rouge Parish Housing Authority (EBRPHA) Communities. Their mission is to provide and develop quality affordable housing opportunities for individuals and families while promoting self-sufficiency and neighborhood revitalization. The EBRPHA serves 12,799 total residents. 58% of residents are elderly and/or disabled. 10,817 residents receive the Housing Choice Voucher. These populations are generally considered “underserved communities” which refers to “populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life”¹.



Community member posing with her first tree to be planted.

In deciding on what to plant, citrus was chosen because it has a strong cultural significance in south Louisiana. It is popular because it is one of the few fresh fruits available during the winter months and it is relatively hardy and well known to locals.

In south Louisiana’s warm climate and fertile soils, citrus has proven to grow very well and relatively disease-free. It also has the ability to survive Louisiana’s mild winters and hot summers. However, there are some limitations on which varieties can be planted. The varieties that were determined to be best suited for STF included: Blood Orange, Naval Orange, Grapefruit, Meyers’ Lemon, Satsuma, and Sweet Kumquat.

Compared with other fruit trees, citrus is low maintenance, highly resilient, and highly productive. However, other fruit trees are possible alternatives. Fig, peach, pear, plum, blueberry, pawpaw, pomegranate, passion fruit and persimmon are all other tree species that could be added or used for future orchards.

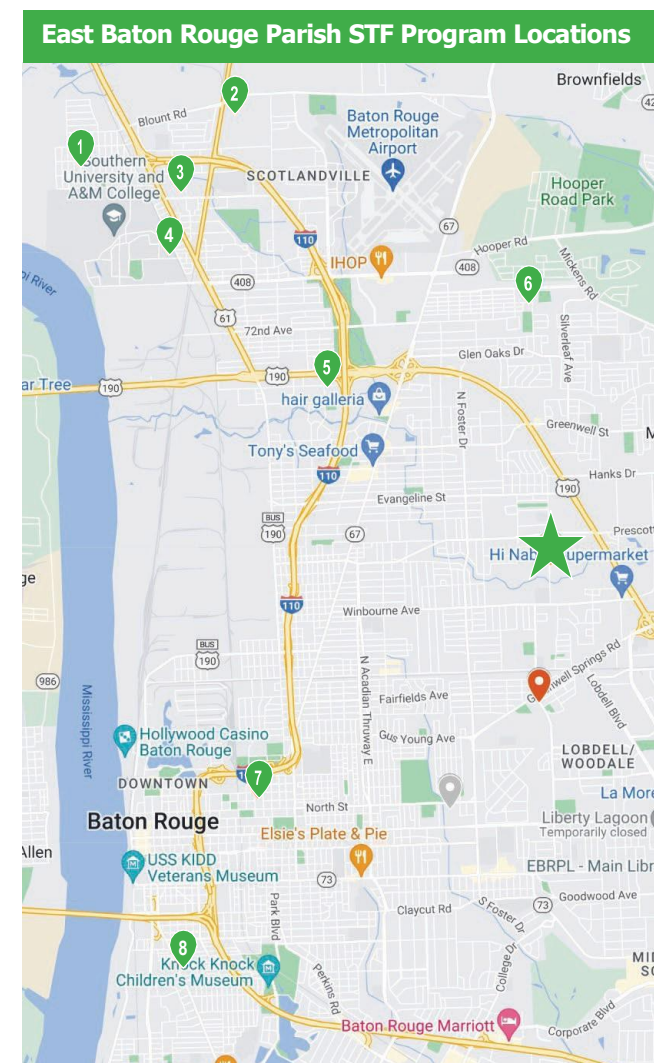
THE STF PROCESS-COMMUNITY ENGAGEMENT

When starting this project, it was beneficial to be visible in the community before implementing the program. Going out with our partner organization Baton Roots to work in the gardens and perform workshops was one way we were able to gain positive visibility within the community. Another way we were able to become more recognizable was going out to scout sites for best planting areas. During these site visits, community members would approach asking questions about what was being done and why. These conversations were excellent opportunities to engage locals and talk about the role trees play in our lives. We were able to build a beneficial relationship with residents and work along with them to establish and manage the Share the Fruit agroforestry orchards.

When gaining community support it was important that the community knew exactly what was going on. Gaining an idea about the perception of planting trees in their neighborhood was important in knowing how the community would respond to the program. This was done by talking about trees and their roles and benefits while scouting/recruiting stewards and volunteers.

A major internal question to be answered was, “How do you gain the trust and recognition of people whom you’ve never met in a community in which you’ve never lived?”. Solving this problem was key to the long-term success and management of the orchards. Conversations with locals often lead to valuable information for planning such as knowing which greenspaces were suitable for orchards and which were commonly used by the community. As locals became more involved in planning and implementation, a sense of ownership and pride started to take root. We also issued a survey to community members to get feedback and recruit local volunteers to help establish and maintain the orchards.

Kids at Capitol Square after successfully planting their first tree



- 1 WOOD PLAZA
- 2 SCOTLAND VILLA
- 3 KELLY TERRACE
- 4 CLARKSDALE
- 5 MONTE SANO
- 6 ZION TERRACE
- 7 CAPITOL SQUARE
- 8 RIVER SOUTH
- ★ HOWELL COMMUNITY PARK/ BATON ROOTS COMMUNITY FARM



SURVEYS

It was crucial to get the community’s input when assessing the needs of the community. We knew that we wanted to plant citrus trees in these areas that the community would recognize and use. To get an idea of what type of citrus trees the residents wanted in their communities, each occupied residence within the housing authority complex received a survey. The survey responses guided our variety, quantity and engagement methods while also providing local perception of the program.

The survey was intentionally made short and straightforward. First, so it was not a hassle to participate and secondly, we recognized that most people were uncomfortable giving their personal information. It was also created to gather information about those who lived in the area and would like to volunteer to plant the trees.

- We wanted to gather information on three main points:
- 1. Which community was the respondent a part of?
 - 2. What type of citrus they would like?
 - 3. Were they willing to volunteer in an upcoming planting? (If yes, asked for contact information)

The survey was created and linked to a QR code then placed on the front door of each residence. It was made so that each person who lived in a residence was able to participate in the survey. From this survey we were able to decide what to plant based on their responses combined with past professional experience.

PLANTING WITH LOCAL VOLUNTEERS

Volunteers were selected from the list of those who responded to the survey. Respondents who were interested in participating in the tree plantings and left contact information were contacted. These volunteers were contacted 3 times: two weeks before planting, one week before planting and on the day of the planting at their site. On the day of the planting more volunteers were recruited by knocking on doors where families lived in the communities and informing them of the planting and inviting them to join. This was commonly initiated by the local volunteers.



BRG staff teaching community members about parts of the tree

ORCHARD PLANNING

Once the community needs/wants were better understood, we had to do the same for the trees by considering certain parameters for the orchards they would be in. For a citrus tree to be successfully established and healthy, it must be in an area that gets 6+ hours of sunlight and has porous soil. Its placement must also be relatively low in foot-traffic, have enough space to develop a canopy that doesn’t interfere with buildings and located where fruit drop won’t harm the aesthetics or become a public safety hazard. The STF trees were placed 15-20 feet apart and clear of structures. This allows for easy usage of the green space and ease of maintenance for lawn mowers, even at maturity.

Additionally, strong consideration was given to the aesthetic value of the trees while in the planning phase. We did not want to implement a basic or traditional orchard lay out for STF Orchards. These trees are in urban settings so they were placed strategically in the landscape based on how they would blend into the existing landscape and become assets to the existing landscape.

EDUCATIONAL OUTREACH

Community education was done whenever interacting with residents to actively increase knowledge of all involved. We would discuss trees, their functions, anatomy, ecological benefits, and importance of maintenance along with any other questions they had about trees. Workshops and regular community events provided additional opportunities for continued education and outreach to establish strong community literacy in U&CF and agricultural practices in communal areas.



MANAGEMENT

Depending on the time of year and seasonal conditions, the establishment period for newly planted citrus trees is 1-3 years. Trees have successfully become established when they can survive on their own without regular watering and can stand upright without the use of stakes.

To ensure successful establishment each tree must receive a predetermined amount of water on a regular schedule during this establishment period. Trees in the STF program are watered weekly with 6-8 gallons of water each or until there is a significant amount of runoff from the mulch ring. For quick, efficient and reliable watering, a 525-gallon watering trailer was used to water each site. It delivers water at 3x the rate of a residential water hose and can be maneuvered in and around all of the sites. Using a 1-inch hose decreases the amount of time required to release the correct amount of water as opposed to a conventional residential hose. During these routine tasks, community members would often come to the truck to participate and learn about the watering needs of the orchards.

During maintenance activities there are several things to pay attention to:

- 1. Tree guards
- 2. Staking Integrity (as necessary)
- 3. Changes to ground (site) around each tree
- 4. Foliage for discoloration, disorders, and insect infestations.
- 5. STF signage
- 6. Damage to trees.

Making sure these activities are maintained and monitored well leads to a strong, productive orchard. Within the first two to three years most fruit will be picked soon after fertilization. This allows for the tree to focus nutrients and energy on growth, development, and establishment.

Management also includes pruning and picking of fruit which tends to occur infrequently by the residents but will take 5-7 years of tree establishment before it truly bares fruit *en masse*. Regular harvest reduces pest and rodent pressures.



STF orchard sign



Pruning to improve branch structure



525-gallon water trailer connected to BRG Truck

BENEFITS OF THE PROGRAM

- Provide healthy food supply for humans and wildlife.
- Contribute to food sovereignty.
- Increased community engagement.
- Establishing positive name recognition within underserved communities .
- Help the environment by producing oxygen, reducing UV-B exposure, that while supporting pollinators.
- Reduce CO2 in neighborhood.
- Advancement of environmental justice.
- Aesthetically pleasing.
- Increase the property value and beauty of the landscape.
- Create joy and satisfaction for the growers and consumers of the fruit.



OUTCOMES

- 100 trees planted
- Successful community outreach
- Formal and informal trainings
- Increase canopy coverage & green infrastructure
- Building resiliency for food security & environment
- Replicable program
- Sharing/advancing agriculture and U&CF practices
- Community agricultural & forestry literacy improvement



NEXT STEPS... GET INVOLVED!

Due to the success of the STF program in East Baton Rouge, the project may continue to flourish and possibly expand. In addition to continued maintenance, education, and working with partners, the Share the Fruit Community Agroforestry Orchards may have more varieties of fruit trees added to each site. The fruit from these trees are expected to be utilized by members of the local community. Once the trees reach maturity, fruit that is not eaten by community members will be incorporated into existing food distribution networks to benefit the community they are in as well as other communities in the area.

It is easily seen that this project should be a viable tool to address underserved communities, environmental and social inequity and food insecurity across the United States in other food deserts and underserved communities.

For more information or how to find help in getting started in your communities, contact any of the partners listed below:

<https://batonrougegreen.com/>

<https://www.thewallsproject.org/batonroots>

<https://www.ebrpha.org/>

<https://www.fs.usda.gov/>

Citations:

1. <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/>



