

Community Gardening in Camden, NJ

Harvest Report: Summer 2009

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The Camden City Garden Club was our local partner in this project.



Watering, harvesting, and interview in progress at the new Mt. Olivet Church garden.

Overview

This report summarizes research on community gardens in Camden, New Jersey, with a focus on the production and distribution of food. The specific aims of this project were to measure the amount of food grown in community gardens and to trace its distribution and use. The broader goal of this ongoing research is to understand household and community strategies to build food security, mainly the roles and impacts of community gardens. It involved three sorts of fieldwork, all conducted in the summer of 2009:

- 1) On-the-ground survey of community gardens throughout the city of Camden, tallying the amount of food under production by crop. Community gardens were defined as those where people garden on land they do not own individually, including multiple-family gardens with separate plots, single-person gardens on lots adopted through the City's Adopt-a-lot program, and gardens at churches and other community-based institutions.
- 2) Weighing of harvest at five gardens in different sections of the city.
- 3) Interviews with gardeners about the distribution and use of harvest, as well as interviews with garden support program staff.

This report is organized in the following sections:

- o ***Acknowledgments***
- o ***Community gardening and food security in Camden*** – An introduction to the issues explored in this report and the context of community gardening in Camden.
- o ***Methodology*** – A description of the research methodology.
- o ***The garden tour*** – A photo essay visiting six gardens, examining diverse patterns of gardening and food distribution.
- o ***Production*** – Estimates of the quantity and economic value of food grown in community gardens in the city, based on the survey and weighing.
- o ***Distribution and food networks***– A brief discussion of patterns of distribution and food networks.
- o ***Appendix*** – Survey and interview forms used in the study.

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The Camden City Garden Club and Children's Garden was our partner in this research, and helped make it a real pleasure for us. Its founder and director Mike Devlin and his colleagues Valerie Frick and Barbara Klaczynska first got us excited about this research when they described the recent growth of gardening in Camden. We thank Gerry Wang at the William Penn Foundation for first introducing us. Mike, Valerie, and Barbara's generosity with their time, staff, institutional memory, and barbeques at the Children's Garden helped us locate gardens, connect with gardeners, and understand the historical and contemporary context of gardening in the city. Rhea Krulowski, Pedro Rodriguez, Gladis Zambrana, Frank Schmidt, Tracy Tomchik, Jeff Clarke, Jesse Loubet, and their colleagues at the Garden Club served as our guides in several neighborhoods and introduced us to different programs run out of the Children's Garden. Tracy provided three of the photos in this report (the authors took the remaining photos).

We could not have calculated the amount of food produced in Camden gardens without the collaboration of gardeners at five gardens: Bridge of Peace Church; Camden Center for Transformation (Heart of Camden); Sam Moton's garden at Jefferson-Kossuth; Paul Williams garden: Paul's Little Empire; and St. Anthony of Padua.

Finally, we thank the many gardeners who generously took time to introduce us to their gardens, recount their histories, and inform us of their distribution patterns. It is to them and their efforts to feed fellow Camden residents that we dedicate this study.

Community Gardening and Food Security in Camden

Community gardening is gaining popularity in cities today. Some proponents claim it can feed urban populations on a large scale, though this has not been the case in American cities since the Victory Gardens of World War II. The extent of food production in urban gardens today has not been documented in most U.S. cities, nor have existing patterns of that food's distribution, consumption, and impacts on community health and economies. This research aims to help close these gaps in our understanding of the relationships between community gardening and community food security.¹ This report is part of a three-city study that also includes Philadelphia, PA, and Trenton, NJ, measuring vegetable production and tracing food distribution and other impacts of community gardens and urban farms. Our findings from Camden are especially important for understanding the recent growth of gardening activity and the ways in which people use gardens to confront challenges of food insecurity.

The benefits of fresh, local vegetables are a familiar story today, most visible in middle class communities, where farmers markets, community supported agriculture, and community gardens are proliferating and considered valuable neighborhood assets. The Saturday market in suburban Collingswood, New Jersey, won an online poll sponsored by the American Farmland Trust as the “most popular” small farmers market in the country in 2009. Greensgrow Farm in Philadelphia's gentrifying Fishtown neighborhood was featured in the *New York Times*, CBS Sunday Morning and made *Natural Home Magazine's* list of the top ten urban farms in the nation. But in terms of local food production, the largest recent gains occurred in this city of 80,000 people located between Fishtown and Collingswood – namely, Camden.

In this Harvest Report, community gardens in Camden help illustrate how people living in a small, very poor city employ gardening in diverse strategies to address issues of hunger, health, youth, aging, and other social, ecological, and economic challenges. Our

¹ Community food security is defined as a state in which all people access adequate, safe, healthy, culturally appropriate food.

partner in this research, the Camden City Garden Club, supports virtually all community gardening in the city as well as much, perhaps most, vegetable gardening in backyards. It represents an important case study in how urban gardening support systems can help scale up urban agriculture and integrate it into diverse institutions and communities. Its membership, which has grown significantly in the past two years, affords a chance to document individuals' and communities' food production and distribution practices in a severely food insecure city.

Camden consistently ranks among the poorest and most violent cities in the United States, a stark example of urban decline, social and political economic crisis, and consequently food insecurity.² Both because of this and despite this, it is also a leading center of community gardening. Families and communities in Camden are especially sensitive to public health epidemics and to economic shocks such as the spike in global energy and food prices since 2005, the recession that followed it, and the inner city's longer-term crisis of food insecurity, obesity, diabetes, asthma, cardiovascular disease, and related problems. Close to 60% of the city's children are reportedly obese, and the city has one full-service supermarket for close to 80,000 residents (roughly one-eighth the national average). It is a "food desert" in every sense of that term. These problems are part of many people's inspiration for gardening.

Over the past two years, Camden residents have expanded community gardening at a rate that outpaces most, perhaps all U.S. cities.³ New and old Garden Club members have increased their visits to the Children's Garden, the Camden City Garden Club's headquarters and main distribution point, collecting more seedlings and seeds to plant. All but a few community or backyard gardeners we met this summer, totaling roughly 100 people, rely on the support of the Garden Club, which distributes some flowers but mainly vegetables and culinary herbs. More people have also begun extending the

² The origins and persistence of Camden's urban crisis are masterfully analyzed in Howard Gillette, *Camden After the Fall: Decline and Renewal in a Post-Industrial City* (Philadelphia: Penn Press, 2005).

³ See our other Harvest Reports on Philadelphia and Trenton, available at: <http://sites.google.com/site/harvestreportsite/>

growing season into early spring and late fall. In 2009, the Garden Club recorded 140 new family or individual members, most of whom garden in backyards, lots they adopt through the city's Public Works department, or properties owned by community institutions ranging from the Fairview neighborhood historical society to the child care center down the street. The Garden Club, its teams of AmeriCorps NCCC participants, and its members also planted thirty-one new community gardens, including twenty-three at churches and other faith-based organizations, supported by a grant from the Robert Wood Johnson Foundation.

Many gardeners and Garden Club leaders explain this growth in terms of Camden residents' sensitivity to recent upswings in food prices and to longer-term issues of public health and hunger. For most Camden gardeners, community gardening is one strategy among many to improve health and food access for themselves, their families, and neighbors. Relatively few people eat the harvest from their garden year round, or supply a large proportion of their families' vegetable intake overall, though those who do offer examples of just how much food people can produce and preserve on their own. Overall, a large and increasing number of people in the city grow and distribute substantial amounts of vegetables. Every gardener we interviewed in Camden shared their harvest with neighbors and other people outside of their families. The details of our findings on their gardening and food practices are related in the production, distribution, and garden tour sections of this report.

By most accounts, from media reports to our interviews with gardeners, Camden is a place where little goes right and efforts at revitalization fail more than they succeed. But the City Public Works Department's Adopt-a-lot program and the Camden City Garden Club are two of the relatively few public and citywide nonprofit organizations that people seem to agree work well and consistently improve people's quality of life. Having studied the decline in community gardens in Philadelphia, due partly to city policymakers' inability to sustain that city's own adopt-a-lot and community garden lease programs, we were impressed by the ease with which Camden residents gain access to land near their homes through the Public Works Department. Camden has roughly

12,000 abandoned lots, about 4,000 of which are city owned.⁴ Access to publicly held land is one of the crucial obstacles or facilitators of urban gardening. Camden's depressed land market and limited funds to manage public land support the logic of having a simple adopt-a-lot program. So do the support programs of the Garden Club, which play a large role in helping city residents use that land productively.

Established in 1985, the Camden City Garden Club has supported hundreds of backyard and community gardens, many of them for decades. Its founder, Mike Devlin, remains its executive director, and by 2009 the staff had grown to about 30, including some 15 teens from Camden County's technical high school who work after class, weekends, and summers. In addition, teams of AmeriCorps workers arrive for eight-week stints from spring through fall. The Garden Club runs a longstanding Grow Lab program in the city schools, introducing children to the basics of gardening science and nutrition. The Garden Club's various programs are supported by philanthropic organizations, including longtime support from the William Penn Foundation, Dodge Foundation, Campbell's Soup, and for most of its history the State of New Jersey.

With the redevelopment of the city's waterfront, Devlin and his colleagues built the Camden Children's Garden, where seasonal festivals celebrate the ripening of New Jersey's strawberries, blueberries, peaches, and other crops. This is the Garden Club's headquarters and main distribution point for seedlings, seeds, and organic fertilizer for gardeners across the city. Its monthly meetings involve cooking demonstrations, tastings, recipes to take home, and fresh food for sale at below-market rates – always what's in season locally. At the end of meetings and seven days a week from spring through fall, the Club distributed some 150,000 seedlings and seeds from the Children's Garden in 2009.

⁴ Deborah Hirsch, "Caring residents transform vacant lots into urban oases," *Courier Post* (October 5, 2008).



Gardeners from Hope Community Outreach picking up fall seedlings at the Children's Garden.

When developing new gardens, the Garden Club follows a relatively simple yet transformative approach. Its staff and AmeriCorps teams scrape a lot free of weeds with a Bobcat mini-bulldozer. They then spread large quantities of mushroom compost from Chester County PA, eight or more inches deep, in 2009 amounting to 1,140 cubic yards, or 30 large dump truck loads. Between the compost beds, they spread wood chips for paths. They erect simple fencing, a total of 4,000 new linear feet in 2009. And they work with gardeners to plant flats of greenhouse-raised seedlings.

Most of the new community gardens in Camden in 2009 are part of the Garden Club's project with a council of faith-based groups, to plant with churches and other religious organizations. It is funded by the Robert Wood Johnson Foundation, one of the United States' largest public health philanthropies, which has made fighting childhood obesity a core focus of its work. Local faith leaders are increasingly concerned about health and

food access, particularly among children in their neighborhoods. For the Garden Club this is an opportunity to tap into rising awareness of the health benefits of gardening and engage younger generations. It hosted barbeques after church on Sunday for people from the twenty-three congregations involved thus far, where kids got to ride the train at the Children's Garden and all enjoyed feasts of mostly grilled vegetables and met other new gardeners.



A young gardener helping to plant one of the new gardens (photo courtesy of the Camden City Garden Club).

Churches are among the most effective and enduring institutions organizing city residents around food, and they have a long though uneven history of gardening. Faith based organizations are among the last strong local institutions left in cities like Camden, with leaders who hold some measure of influence over their constituents' behavior, including in matters of eating. Most run food cupboards or other feeding programs. And most have kitchens and youth programs that use the gardens, building gardening and food preparation knowledge among a generation whose parents often missed it.

Yet keeping community based organizations actively gardening usually requires continued support. Our research in Philadelphia, Camden, and Trenton found that while some community institutions have sustained gardens and related programs for decades,

others have waned when funding for garden support programs has diminished or key staff moved on. For now, the twenty-three faith-based gardens in Camden reflect the Garden Club's significant capacity and scalable model. They have succeeded in engaging new generations of gardeners, diversifying the city's population of community gardeners to include substantial numbers of parents with young children as well as the kids themselves. The faith-based gardens also reflect a great diversity of food distribution patterns, as they connect to congregations' varied programs and constituencies.

Like the city itself, overall community gardeners and their neighborhoods are relatively homogenous economically. Almost 95% percent of Camden's community gardens are located in census tracts where the average household lives below 200% of the federal poverty line. Yet the gardens are diverse in most every other way – in terms of size, land use, racial and ethnic groups, and formal organization and institutions (or lack thereof), as well as in the ways that people employ gardening to feed their families and communities. Gardeners include African Americans, Puerto Ricans, Mexicans, Dominicans, and a few Irish, Italian, and Eastern European Americans and other whites. Experienced gardeners are mostly of retirement age, though new gardeners are emerging among youth and families involved in churches and other community-based institutions. The range of garden sites includes daycare centers, youth programs, housing projects, parks, a neighborhood historical society, a museum, the front and back yards of vacant houses, and formerly vacant lots adopted through the Department of Public Works.

Community and church gardens in Camden are plotted on a map on the following page. It shows they are located in virtually every neighborhood, except for the industrial zones along the waterfront and areas with ample backyards in the eastern parts of the city.

The next section of this report details the methods of this study, following which the garden tour, production, and distribution sections elaborate on our research findings on community gardening and food networks in Camden.

Methodology

The fieldwork for this study consisted of three distinct parts.

1) Site Survey

The goal of this task was to map community gardens growing food in Camden in 2009 and to document summer vegetable production as comprehensively as possible. Camden City Garden Club staff provided a list of the gardens it has supported over the past five years; helped sort the list to identify community and backyard gardens; and in many instances introduced us to gardeners on site or by phone. In late July and early August, when summer vegetable crops are generally at their peak size, the research team visited some 70 sites, confirming the status of gardens and measuring the square footage of each vegetable crop under production at the 44 community gardens we found growing food. We defined community gardens as sites where people were cultivating land they did not own, either through the City's Adopt-a-lot program, at churches and other community organizations, or in public parks and housing projects. These tabulations of square footage by crop, coupled with the next part of data collection, enabled us to estimate food production in community gardens citywide. Information recorded in this site survey also included the total area of the garden property, water sources, presence of fruit trees, and other data. Site survey forms are included as Appendix 1.

2) Weighing Harvest

In order to provide a basis for estimating the productivity by weight and dollar value of the food production tallied in the site survey, we arranged with gardeners and support organizations at five gardens to weigh the harvest from selected plots. These included gardens in five different neighborhoods, with diverse soils, growing conditions, gardeners, and institutional arrangements (or lack thereof) – and constitute a representative cross-section of Camden's community gardens. They were:

- o Bridge of Peace church community garden, Fairview
- o Heart of Camden community garden, Waterfront South
- o Jefferson-Kossuth garden, Centerville

- o Paul's Little Empire garden, Bergen Square
- o St. Anthony of Padua community garden, Cramer Hill

Gardeners weighed their harvest by crop, recording their tally, sometimes with the assistance of our research team. These figures were employed in calculations to estimate the average productivity of different crops. These averages were then used to estimate the production of all other gardens in the site survey. The results and more details of the assumptions behind this part of our methodology are discussed in the production section of this report. In sum, we consider this a conservative calculation of both the volume and dollar value of food grown in community gardens in the summer of 2009, especially since we did not count spring or fall crops and did not include the harvest from fruit trees or bush and cane berries in our calculations (we did include strawberries).



Weighing crops at Paul's Little Empire.

3) Interviews

We conducted 25 formal interviews with gardeners at a cross-section of Camden gardens – of every size, ethnic group, institutional arrangement (or lack thereof), and section of the city. We also interviewed staff at the Camden City Garden Club and Children's Garden. These interviews focused on the history, organization, production and distribution of food from the gardens, as well as the broader food environments of Camden neighborhoods. The results are discussed mainly in the garden tour and distribution sections of this report. The list of interview questions is included as Appendix 2.

The Garden Tour

Community gardens in Camden take many forms, grow many things, and involve all sorts of people. This tour visits six gardens, which together represent a cross-section of land use, institutional, and food production and distribution patterns. They illustrate some of the various economic, social, environmental, and health impacts of urban gardens. It begins with stops at older gardens, then visits newer gardens, including three different faith-based organizations.

Unlike our findings in Philadelphia as well as evidence from other cities with a more diverse class structure, all community garden plots we found in Camden were growing food. Still, Camden residents garden for reasons well beyond the food. Some reported that they garden to promote mental health, to cope with their own aging and the stresses of life in the city. Many people garden to preserve and pass on their cultural heritage, and some join community gardens more for social interaction. While this study focuses on food production and distribution, these motivations and activities all intersect with gardeners' cultivation, consumption, and other food ways. This brief garden tour touches on some of these intersections.

Jefferson-Kossuth Garden, Centerville

When we first visited Sam Moton's garden in Centerville, we didn't find anyone in the garden or on his porch across the street. Then a man appeared from around the corner with tools in his hand. Sam had been setting up a rainwater collection system on the roof of one of the houses adjacent to his garden (he already had such a system gathering water from his daughter's roof next door).

Neighbors and other gardeners know Sam as one of the city's great gardeners. At 87, he eats garden vegetables year-round with the help of his freezer, a pattern shared by other older African American men in Camden. Sam has understood the benefits of organic

gardening since long before the recent food and gardening craze. And his critique of the industrial food system is as sophisticated as anyone's.

Sam goes to two or three supermarkets but the produce never really looks good to him there. He mostly shops at Whole Foods and Wegmans in Cherry Hill. He always tries to shop organic but wonders when he buys organic bananas at \$.79 per pound whether they aren't the very same bananas on sale at \$.49 per pound.

His garden is on a vacant lot directly across the street from his house. He usually works in the garden from 6:30 AM until mid-morning and then sits on his front porch overlooking the garden.

Sam learned to garden from his grandparents who raised him on their farm in rural South Carolina. His parents had apparently migrated north but left Sam and another sibling with the grandparents to help out on the farm, where he remembers cutting sugar cane and picking vegetables. His grandparents had a horse and buggy on which they would take their goods to market in the nearest town, but Sam was never in a town until he moved to Camden County at age seven, on the eve of the Great Depression. He moved because there were no schools where his grandparents lived. He moved to the city in 1945 from the Camden County countryside after World War II, in which he served as a radar technician. He moved with his mother to a house around the corner from where he now lives. They gardened there in the backyard.

From his house, Sam produced a copy of the city's map of properties. Through the City of Camden Public Works Department's Adopt-a-lot program, he has care of the parcel he has gardened now for over a decade. This program helps make the process of residents taking over care of vacant lots in the city a relatively navigable, easy-to-use city service. This is something that works in a city where local government has been mired in a legacy of corruption cases and a state takeover for the past seven years. It supports a large proportion of Camden's community gardening.

Sam gardens by himself. But many people eat the food he grows, which he delivers to neighbors and family, hands to passersby, and leaves in a basket on his porch for friends and strangers to take what they will eat. In our visits with Sam, we saw women from the housing project across the street inquire when the tomatoes would be ripe, and neighbors from around the corner reminding him they look forward to the okra. There is a lot of foot and vehicular traffic because of the park down the street. Many people appreciate what he does and thank him for it. They use the trashcan he puts out and he appreciates that. People are always asking him how much the produce sells for. He doesn't sell the food. He only wants a thank you.

Sam is a board member of the Camden City Garden Club. He attends the monthly meetings and tries to take his nieces. Generally he receives a load of compost from the garden club, although this year he did not because he felt his soil needed a rest. He does take a few seeds and some seedlings from the Garden Club, but in general he saves seeds from the plants he grows each year. He always saves his lima beans and black-eyed peas. He doesn't really believe in hybrid cultivars and genetically modified plants, so the vegetables he grows produce seeds he can use the next year (hybrid plants generally produce infertile seeds).

In March Sam starts the garden and with luck his collards will last until Christmas. Collards always taste better after the first frost. He extends the season by covering the collards and turnips with plastic if there is a spring or fall frost. He also covers plants with newspaper during the hot summer days and removes it at night. He pays close attention to the weather.

Sam cans and freezes, primarily freezes and he doesn't use the hot canning method. He preserves tomatoes, okra, broccoli, and collards primarily. He uses food saver bags in which the air is expelled before freezing. His method for freezing beans includes harvesting and letting them sit for 24 hours, then washing and drying and then freezing them. At the end of July, he still had beans and okra from the previous year's harvest.

Collards taste best as collards, Sam told us. No spices, no oil, perhaps an onion or white potato is cooked with them. Pick the collards and let them sit in the refrigerator for 24 hours. Clean them and put them back in the refrigerator for 24 hours before using them.

Sam believes in healthy living. He takes no prescription medicine or over the counter drugs. He had no childhood diseases and doesn't drink or smoke.

Like Sam, many gardeners in Camden explain their motivations in terms of public health, often with reference to obesity and asthma. Other gardeners, old and new, told us they began growing vegetables when they got tired of eating unhealthy foods. Evidence from interviews suggests that gardeners tend to have wider "foodsheds" than their neighbors, more often shopping at grocery stores outside the city. Many people cited the limits of having just one full-scale supermarket. Echoing other gardeners, one man in the Lanning Square neighborhood told us his neighbors are "really harming themselves" and their children by shopping so much at corner stores. He pointed out, "healthy food is expensive," but growing all of his own summer vegetables allows him to shop selectively at the Trader Joe's in Philadelphia or Marlton.

While the Garden Club's Grow Lab, Children's Garden, and faith-based programs involve children in gardening and healthy food consumption, more of the city's experienced community gardeners are of retirement age like Sam Moton. Gardening is something that many people do, or do much more, upon retirement. It helps address many of the social, physical and mental health issues of aging. Perhaps nowhere in Camden is the social life of gardening in retirement livelier than at the so-called "Men's Garden" in the Morgan Village neighborhood about ten blocks south of Sam's garden.

The "Men's Garden," Morgan Village

Located in a county park behind a line of trees, it is virtually impossible to see the Men's Garden from the street, its plots laid out along the banks of one of the tidal creeks that runs through the city. But it is the largest garden in the city, almost two acres. This is a

garden tied to no institution besides informal relationships with the county staff who oversee the park. Most gardeners are members of the Garden Club, which dumps piles of compost and woodchips for them. Otherwise, it is basically an informal club. The clubhouse built by the gardeners has a generator, a wood stove for colder months, and a dock out onto the creek where people sometimes fish.

Started some thirty years ago, there used to be more than thirty gardeners, though as people have passed away it is now down to a half-dozen regulars and a half-dozen others who stop by frequently. The youngest gardener is 55, the rest 65 or over, all men, no children or families. The Men's Garden works by word of mouth, and the two people who've been there since the beginning are its unofficial leaders, assigning plots to newcomers over the years. Most of the gardeners live in the immediate neighborhood, though some drive from other neighborhoods in the city. Their presence helps keep away dumping in the park, and they have sometimes chased away trucks seeking to dump construction debris.

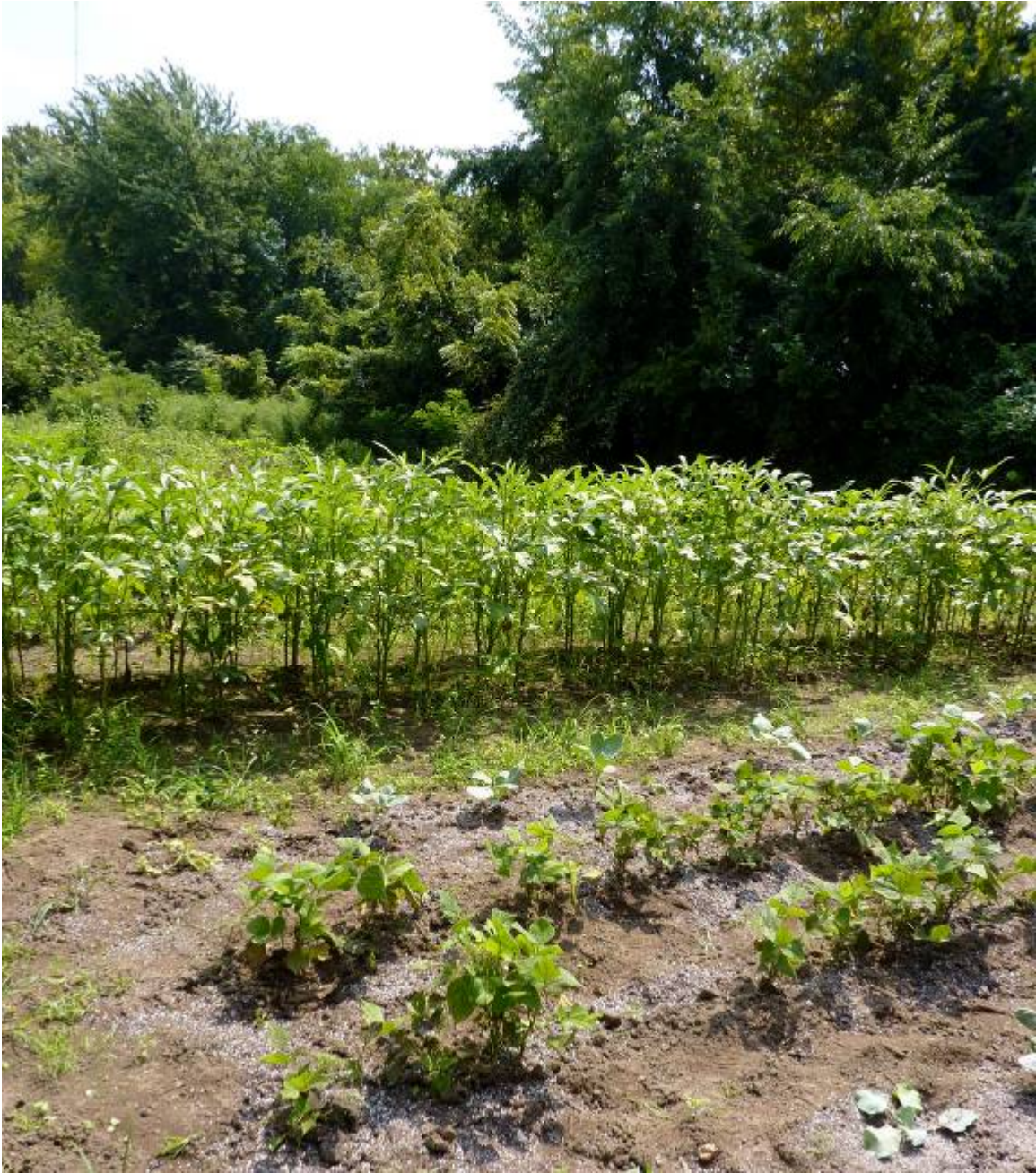


Tilling in preparation for fall crop planting, with the clubhouse in the background and one gardener dressed on his way to a funeral.

Tom's plot has a lounge chair under an umbrella, where we woke him from his afternoon nap the first time we visited the garden. He offered us a cold drink from his cooler and showed us around. One of the highlights of his garden was the counterweight system by which he grew nine-foot-tall tomatoes using string tied to beer and soda cans that he fills with water as the plants get bigger and heavier. Tom comes to the garden for peace and quiet, which we obviously violated that day. Other Camden residents told us their gardens let them escape from the stresses of the city. Conversely, several people complained that loud music, cars, and drug dealing interrupted the peace of their gardens. Inside the Men's Garden, though, it's hard to tell you're in the city.

Tom has his own generator to pump water from the creek, while others fill up five-gallon buckets when the tide is in. This year, however, there was a lot of rain and the creek

flooded the garden several times. At least two gardeners claim to have won the watermelon-growing contest this year.



Rows of okra and beans at the Men's Garden.

In their large plots, rows of beans, okra, peanuts, and collards reflect the gardeners' roots in the South. We counted a large collard crop whose yield we estimated at 1903 pounds,

along with 1342 pounds of beans, 626 pounds of tomatoes, 492 pounds of peppers and the only peanuts we saw growing in Camden, an estimated 173 pounds worth. We can calculate how many servings these vegetables would represent for the 12 gardeners who work at the Men's Garden. The collards represent a total of 9,991 servings, or 832 servings per gardener. The beans represent a total of 7,448 servings, or 621 servings for each gardener. Even the tomatoes provide a total of 3,124 servings, or 260 servings per gardener. Added all up, the men produced a total of 24,179 servings of summer vegetables, or 2,015 servings per gardener. That is enough to provide 3 servings of summer vegetables for 22 people every day for a year. If eaten fresh over a period of 3 months, it is enough to feed 88 people three servings of seasonal vegetables each day. To put these figures in perspective, it is worth repeating that we only counted summer crops, not those grown in spring or fall, and that 2009 was an unusually lean year for vegetable harvest. This was evidently a smaller harvest compared to other years at the Men's Garden. Still, the gardeners here clearly provide fresh (and frozen) vegetables to a lot of people.

Top crops at the Men's Garden:

Collards	1903 pounds	5.25 servings per pound	9,991 servings
Beans	1342 pounds	5.5 servings per pound	7,448 servings
Tomatoes	626 pounds	4.99 servings per pound	3,124 servings
Peppers	492 pounds	7.35 servings per pound	3,616 servings

It is a lot of work to garden at this scale. "This will bust your chops," says William. He spends about four hours a day at the garden, arriving around 5:30 AM and working until it gets hot. The men spend warmer hours of the day under a tree in the meadow between the garden and the homes nearby. They have cookouts there.

The gardeners leave much of their harvest on the table under the tree. People come by to get the food. Anybody can take whatever is there, William reports. "Knock yourself out." His friend John, who does not preserve his harvest, told us he ate about three tomatoes from the garden this year. The rest he gave away.

William has two freezers and preserves much of his harvest. “You’d be surprised by what you can freeze, everything except melon.” He eats year round from the freezer and also supplies his large family, which includes his wife and thirteen children ages 22 to 46.

Because of the dwindling numbers of gardeners, it’s harder to keep the weeds under control. John has cancer of the esophagus and last year was unable to garden. He was glad to be back this year, gardening for exercise and because he’s done it for so many years, having grown up in Georgia on a farm. It’s a way of life, he explained.

One of the big open questions of community gardening in Camden and other inner cities in the United States is whether this way of life will continue. The generation of gardeners who came north in the Great Migrations of African Americans and Puerto Ricans in the twentieth century is passing. The informal networks of food production and distribution they have developed are substantial. The patterns exhibited by Sam Moton and the gardeners at the Men’s Garden are repeated across Camden and Philadelphia. They represent a great wealth of knowledge and capacity for production. Whether and how new generations might step into their roles as major vegetable producers for households and communities is a question whose answers are still playing out in the next four stops on this tour, where we visit a range of formal and informal efforts to cultivate new gardens and gardeners.

St. Anthony of Padua, Cramer Hill

In the spring of 2008, nine-year-old Alex Checo came home from a school field trip to the Children’s Garden with a tomato seedling. Despite some reluctance on his mother’s part, Alex planted it in the small patch of dirt outside their home. It yielded an abundance of ripe, red fruit, which helped get the entire family excited about planting a larger garden the next year. They were among the first families to sign up for a plot in

the new garden nearby at St. Anthony of Padua, where Alex goes to school and his father Luis works as a custodian.⁵

The garden site is across the street from the church and school, where the Camden police ran a substation out of trailers on the lot from the mid-1990s to 2002, after which the trailers sat vacant and vandalized, the area frequented by drug dealers. In December 2008, St. Anthony's and the coalition Camden Churches Organized for People asked the city and the police department to remove them. Shortly thereafter, St. Anthony's adopted the lot from the City and joined the Garden Club.

Gardeners initially tended ten separate plots, each roughly 35 by 5 feet, planted with their vegetables and herbs of choice. Several of the Franciscan friars who live at St. Anthony's took plots, as did the Checo's, Alex's cousin who works at the Children's Garden, and a neighbor family not affiliated with the church. Together, they represent a wide range of ages, including young children, their parents, and seniors. The gardeners are mixed ethnically, mostly white friars and Latino neighbors, as the northern parts of Camden have been a destination for Puerto Ricans, Mexicans, and Dominicans.

Gardening has been important for newcomer integration, in Camden and other cities. At one of the Sunday barbeques at the Children's Garden with other congregations, a Mexican mother from the garden at St. Anthony met two Mexican sisters recently settled in the Fairview neighborhood across town, who gave her heirloom red and blue corn seeds to plant. Gardening enables immigrants to grow familiar and sometimes hard-to-find crops and pass on a piece of their culture to their children growing up in the U.S. Multicultural gardens like St. Anthony also help newcomers and longtime neighborhood residents get to know each other and grow to appreciate one another's food and culture.

⁵ Lavinia DeCastro, "Vacant city lots transform into family-tended gardens," *Courier-Post* (May 10, 2009).



Gardeners at St. Anthony with some of their harvest.

Gardeners at St. Anthony produced almost 2,200 pounds of vegetables including 663 pounds of tomatoes, 260 pounds of peppers and 255 pounds of eggplant. Despite this being their first season, they were able to harvest 3,308 servings of tomatoes, 1,911 servings of peppers, and 854 servings of eggplant. The total represents 6,073 servings, which could provide 3 servings a day of vegetables for three months for over 22 members of the community, providing all the vegetables needed for many more persons than just the gardeners.

The gardeners distributed vegetables through a variety of channels. The church's youth program tended two plots, sending most of the food home with the kids. With plots allotted to several families, some gardeners consumed most of their harvest themselves. Most also gave away food to friends and neighbors. Brother Gerry made a habit of leaving a basket of vegetables in front of the church for people to take as they arrived and

departed on Sundays. He told us that the friars who do the food shopping bought very few vegetables this summer because of the food from the garden, which the friars also shared with people at Francis House, their facility for people with HIV and their relatives. Brother Gerry passed away in 2010, and the congregation named the garden in his honor.

In August the Garden Club and its third AmeriCorps team of the season spread more compost across the large site, which is close to three-quarters of an acre. They laid out compost and wood chips to spell “PEACE.” The expansion will allow more of the church’s regular attendees to have their own plots. The initial group of gardeners was excited to soon be planting fall crops and extending their growing season. Some of the friars hoped to attract more gardeners from around the neighborhood, not necessarily affiliated with the church. People at other new gardens expressed similar aims, though their present and planned food production and distribution activities varied significantly. Our next two stops on this tour elaborate on the diversity of faith-based organizations’ gardening and related strategies for building community and food security.



Expanding the garden at St. Anthony, with the school and church across the street.

Heart of Camden, Waterfront South

Gardening in Waterfront South is intimately tied to environmental justice. The neighborhood is home to a large cement plant and waste facilities that pollute the air, while a ghastly legacy of lamp, chemical, and other factories still pollutes the soil. The center of social and environmental justice efforts here is Sacred Heart Catholic Church and its community development arm, Heart of Camden. People here are longtime members of the Camden City Garden Club for all of its 26 years.

Andrea Ferich graduated from Eastern College and came to live in a Christian intentional community around these institutions. She introduced herself to Sacred Heart's leader, Father Michael Doyle, as a farmer. She became involved in environmental justice issues and in the Environmental Protection Agency's Community Action for a Renewed Environment. When the trash to steam plant began operating, the program bought a greenhouse that went to Heart of Camden and Andrea became the greenhouse manager. She also helped organize and run the Camden Center for Transformation, of which the two nearby gardens and greenhouse are a part. In a neighborhood as polluted as Waterfront South, people grow food in raised beds or other "above ground" methods.



The greenhouse and one of the gardens.

Through the Camden Center for Transformation, Andrea has helped organize a community supported agriculture (CSA) program that brings fresh food into the community with set hours at a central location, the former convent around the corner, which has storage space and a refrigerator. People are always coming around and Andrea stated she could easily spend half her time going to the garden when someone asked. To expand the educational opportunities, Andrea collaborates with the Rutgers Master Gardeners program in education and soil testing as well as with Cooper Hospital in nutrition programs. Andrea and the neighborhood youth grow a variety of crops with the three largest potatoes, tomatoes and cucumbers.

Andrea told us that she doesn't see young parents take the time to prepare food, acknowledging they can't compete with high fructose corn syrup, which leaves stomachs feeling full and accounts for much of the perverse relationship between hunger and obesity. She also noted that for too many Camden residents, drug addiction reinforces unhealthy eating patterns. Money going to drugs and the instant gratification people come to expect as users and eaters lead to consumption of cheap food with bad calories.

Andrea finds hope in the cultural changes brought about by the faith-based organizations. Her mission is to work with the neighborhood kids, to inspire them so they know they can make a difference. She loves the pre-teens and the 12-14 year old group. They help her in the garden and greenhouse and in return they take food home. She operates both as after-school programs where the youth can come to a safe place and learn work skills. She finds they have abundant imaginations. They have started cooking classes that incorporate the cuisines of the Dominican Republic, Puerto Rico as well as soul food. Andrea has also been working on a sustainability tool kit for living in Camden. It involves what all people can do.

The community gardening, nutrition education, and food distribution around Heart of Camden reflect the tenets of Sacred Heart and its commitments to environmental justice and peace. The church and community in Waterfront South have helped inspire similar work of religious intentional communities in inner cities, including some that garden in

the Kensington section of Philadelphia. Andrea's model programs notwithstanding, the neighborhood's persistent poverty, pollution, and drug addiction highlight some of the bigger obstacles to engaging the most distressed inner city communities in gardening on a large scale. As a pastor in another section of Camden reminded us, poverty for most people doesn't mean sitting on the stoop all day or watching TV, but rather scrambling to get the kids to school and daycare, work multiple low-paying jobs, and navigate bureaucracies of dispersed social programs, from food stamps to medical care to WIC. Poor people are often too busy to garden.

Hope Community Outreach, Whitman Park

We couldn't quite fathom how Pastor Odessa Edmonds had the time to garden, either. On top of a full-time job as a social worker, seeing 270 clients a month, she runs Hope Community Outreach in the Whitman Park neighborhood on the east side of Camden. Located in a corner rowhouse, it is not a big church like the last two stops on this tour. But it is tightly packed with computers, a food cupboard, and a space for worship.



Pastor Edmonds in the food cupboard at Hope Community Outreach.

The center, Pastor Edmonds stressed, is a safe place for children. It runs after school and summer programs largely to keep kids fed and off the street, as well as computer skills and other programs. She mentioned the kids love to get online, even the teenagers. This summer students from the University of Medicine and Dentistry of New Jersey in Stratford gave the 23 kids and their families in the summer programs cameras and had them document and vent about losing family members and friends to drugs and violence.

Pastor Edmonds lived in Whitman Park until her daughter was about five, at which time she moved to the Camden County suburbs after witnessing a man shoot another man in the leg just outside her house. There is a lot of turnover and vacancy in the neighborhood, as there are many absentee landlords and the eviction rate is high. She said she would like to work on housing development someday. For now she runs a broad portfolio of social programs helping people address their everyday problems.

A few years ago, Pastor Edmonds connected with the New Jersey Tree Foundation to plant street trees, something the Tree Foundation has done across the city, often in collaboration with the Garden Club. After the trees they planted flowers in the tree pits and soon other neighbors did the same thing. It “allowed people to come out and have some pride in their own spot.” Then they began to plant flowers in front of the houses, primarily the vacant ones, to make them less of an eyesore.

In the spring of 2009, Pastor Edmonds and her neighbors got into growing vegetables, becoming part of the Garden Club’s faith-based gardening initiative. They planted tomatoes, peppers, and collards in the front yards of vacant houses, and adopted a lot around the corner through the City. We also found these patterns of planting vegetables in the front and rear yards of vacant houses and flowers in empty sidewalk tree pits in North Camden and Lanning Square.

The kids in the summer program have helped in the garden, and some have eaten the food and taken it home. Most of the harvest, though, goes to seniors, some of whom come

around to the garden. Pastor Edmonds, her colleagues, and the kids also do some delivery. She herself grew up in North Carolina, where she learned gardening and helped harvest farms. She moved to Camden in the early 1970s.



Pastor Edmonds and a neighbor at the vegetable garden at the vacant house next door.

When we ran into Pastor Edmonds picking up fall crops at the Children's Garden, she told us about the time she took the kids to a Sunday barbecue there. One kid pretended to eat grilled asparagus but was actually dropping it on the ground. But most kids learned to eat it, along with the carrots, broccoli, and zucchini.

Part of the philosophy at Hope Community Outreach is to get people who want free food, mainly people who stop by the garden, to do a little work like pulling weeds. We met many gardeners who engage neighbors, including children, in helping out. But we also met some who complained that people came by their gardens wanting food without wanting to help out. This, according to other reverends with whom we spoke, is one symptom of Camden's entrenched poverty.

As a social worker, Pastor Edmunds helps people get food stamps and learn strategies to make them go a long way. She sees most neighbors in Whitman Park shop for only one or two things at corner stores. Many families stock up on cans for hard times. But she feels people waste a lot of food.

The food cupboard at Hope Community Outreach is officially open once a month, but Pastor Edmonds also gives food to people who stop by. It buys food from the South Jersey Food Bank in Pennsauken, just outside Camden. People come to the cupboard from the neighborhood as well as from elsewhere. Pastor Edmonds estimated it served some 400 families in 2008, and that number had increased to about 700 in 2009. She knows some people get the food and resell it for drugs, but mainly it is used by families.

Hope Community Outreach illustrates as well as any community organization how gardening is used in diverse ways as one of many strategies to address the problems of people and neighborhoods. The faith-based institutions visited on this tour have organized their gardens and the formal and informal activities around them, including the distribution of the harvest, in a great variety of fashions, reflecting the challenges and opportunities of their constituencies and communities. The last stop on this tour, with Sam Moton's garden and the Men's Garden, helps show how this diversity extends to the strategies, activities, and impacts of informal gardens not tied to institutions other than the Garden Club.

Paul's Little Empire, Bergen Square

Paul Williams has gardened for three years. He began by clearing a lot behind his house where three abandoned houses had been demolished. He cleared the brush and trees from the site by himself and grew some tomatoes, peppers, watermelons, collards, and cabbage. He went to City Hall to get title to the land, but the Adopt-a-lot ended up giving

him his current site, where nine rowhouses formerly stood. He named it Paul's Empire of Landscaping and Garden Creations.

Retired from Conrail a few years ago, Paul gardens because he likes to grow things, likes feeding people, and likes to work and keep busy. Paul attends the Camden Garden Club meetings and gets compost, some seeds, but mainly seedlings. He also got his fencing from the Garden Club. He is fairly new to the club but enjoys the meetings and the support he gets.



Paul's Little Empire has flowers along the sidewalk and vegetables inside the fence.

Paul was one of our most faithful weighers, with some of the better crop yields in Camden. At the beginning of the season he was growing many of his tomatoes unsupported, but he is an eager learner about gardening and we soon had all his tomatoes supported off the ground. He had trouble with blossom end rot on his tomatoes at the first of the season and believed it was a fungus or insect problem. Instead, blossom end rot is a human problem caused by uneven watering. In this case the weather had been rather unusual with the rainiest June on record followed by a dry spell in July. Once the tomatoes hit the drier weather, the blossom end rot disappeared but it greatly reduced the yield on his tomatoes by probably a third. Even with the problem, he harvested 464 pounds of tomatoes, 286 pounds of peppers, 149 pounds of cucumbers and 125 pounds of collards. It is impressive that one person could harvest 2,315 servings of tomatoes and 2,102 servings of peppers. In total, Paul produced 5,997 servings of fresh summer vegetables. This translates to 3 servings a day for three months – the height of the growing season – for about 22 people. Dividing the harvest further, Paul grew enough to provide all the fresh vegetables needed (3 servings per day) for all of the roughly 60 neighbors on his block for a period of one month.

Paul doesn't really cook but his girlfriend is a good cook and she cans. He pickles hot peppers in vinegar and eats them on sandwiches during the winter. He froze some of the corn he grew.

Paul gives away most of his food. He isn't rich but he realizes he has more than many of the people around him; many are very poor and many are addicted to drugs. He gives it to anyone who comes by and asks. Sometimes people will offer him money but that really isn't part of the gift. Paul is a deeply spiritual man who feels that many of his neighbors, particularly those addicted to drugs, are spiritually as well as materially poor. Across the street is a large extended family whose members come from as far as Willingboro to visit their relatives and get food from Paul. He also gives some food to a nearby church for its cupboard, both fresh and canned. He didn't eat the tomatoes from his garden until this season.

Paul feels he has made a difference in the neighborhood. This is a poor neighborhood with a lot of drug dealing and street drinking. He feels that everyone likes what he does and that he has earned their respect through his hard work. When he goes to the corner, the drug sellers ask if they can buy him a soda or some potato chips. The people who sit under the trees next to the garden keep the area cleaner now. Most of all, Paul is made proud by the young kids who see him working so hard and see that he accomplishes so much. He thinks it makes them think that maybe they can get a job and work hard as well. Across the street, he helped a family with eight kids start a garden by planting tomatoes. The kids come over now and he treats it like an educational program.



The shaded area where neighbors sit next to Paul's garden.

The gardeners on this tour help illustrate how people use gardens to build healthier and more humane communities. They show that generosity takes many forms, only some involving distribution of food. Gardening can be an effective strategy to address multiple issues in poor communities, partly since it is labor-intensive and not capital intensive. It produces a large proportion of only some people's vegetables, and is a limited but growing strategy for improving nutrition and fresh food access in Camden and other inner cities. But the 44 community gardens we surveyed in the summer of 2009 produced and distributed a large amount of food. The overall production patterns are reported in the following section.

Production

Our survey of community gardens in Camden examined several dimensions of production. The tables and narrative in this section report estimates of how many pounds and dollars worth of vegetables they grew in the summer of 2009, though this is only part of the story and does not include spring and fall crops. More significant for local food production, however, are three trends in Camden: the recent growth in the number of gardens and gardeners, the new generations of gardeners that has brought, and the overwhelming focus on food production.

Community gardens in Camden grow food and not much else. Unlike other cities, which typically include a mix of food-producing and ornamental gardens, all community gardens we surveyed in Camden were growing vegetables in mid-summer. Some also grew flowers, though not many flowers, and nearly all grew culinary herbs. A few gardens include fruit trees and beehives. The Garden Club distributes some flower seedlings, though mainly seedlings and seeds for vegetables, herbs, and also strawberries.



Fruit trees and beehives in one of Children's Garden employee Pedro Rodriguez's two Lanning Square gardens.



A garden in Centerville, illustrating the scale of most the new gardens planted with faith-based organizations.

Most community gardens in Camden are laid out in a way to support no-nonsense food production, either in rectangular beds or long rows of crops. Some experienced gardeners build creative trellises or set up water collection systems, as described in the garden tour section of this report. Some gardens have sheds, but only one that we visited, on the edge of Rutgers University's campus downtown, had a formally designed seating area. Most of the space within the city's gardens is simply devoted to growing vegetables. As documented in table 1, most community gardens in Camden are substantial but not huge, between 1,000 and 5,000 square feet in gross area (including crops plus paths and other spaces). The one real outlier is the Men's Garden, whose nearly two acres had close to 19,000 square feet of vegetable crops growing in mid-summer, nearly one-third of the citywide total.

TABLE 1 : Size of Camden community gardens (square feet)

Size	<1,000 sf	1,000-5,000 sf	5,000-10,000 sf	10,000-20,000 sf	20,000-40,000 sf	>40,000 sf
Number of Gardens	15	26	3	3	0	1

TABLE 2 : Summary production statistics

No of gardens	Total Area of gardens	Area of Crop Production	% Crop area to Gross area	Estimated Pounds Grown	Estimated Value of Crops Grown
48	164,472 sf 3.78 acres	60,621 sf 1.4 acres	37%	30,836	\$64,756

At the 48 gardens we surveyed, we counted 1.4 acres of diverse crops under production. Counting paths, seating areas, space between plants, and other space without crops, the total area of these gardens was almost four acres. Based on the crop yields recorded by the gardeners who weighed their harvest for us, we estimate that community gardeners in Camden produced some 30,836 pounds of summer vegetables. If purchased from farmers markets or other vendors of fresh, local produce grown organically, this food would cost about \$64,756.

Several broader dimensions and trends in production also merit discussion. The expansion of gardens, the population of gardeners, and gardening beyond just the summer season all reflect marked growth in local food production in Camden, even just from 2008 to 2009. The first two trends are discussed in some detail above. The Garden Club has also purchased, raised, and distributed an increasing number of cool weather seedlings in the spring and fall. As we wound down our study in the fall of 2009, it gave out some 30,000 transplants as well as cold crop seeds to its members in community and backyard gardens. Despite over 6 feet of snow in the winter of 2009-2010, many gardeners were still picking spinach, collards, carrots, beets, cabbage, broccoli, Swiss

chard kohlrabi, Brussels sprouts, leeks, turnips, rutabagas, and other vegetables the following spring and into the summer.

These patterns notwithstanding, this summer's fieldwork documenting the square footage of vegetable crops under production and weighing their harvest was compromised by weather that severely limited production levels at farms and gardens across the Northeast U.S. Most gardeners we interviewed also reported problems with the weather. The yields recorded by the gardeners who weighed their harvest for us, as well as those from other gardens and farms in the region, were lower than just about any year in recent decades. However, most gardens we visited in Camden had healthy vegetable plants and few weeds, thus our square footage figures permit us to estimate levels of food production in a more average year for climate and vegetable gardening.

Cool, rainy weather in the first half of summer 2009 was the main problem.

Temperatures in June were 2°F below average temperatures during the day and almost 3°F below average during the night. The average low nighttime temperature for June was barely 3°F above the minimum of 55°F needed for the members of the nightshade family, tomatoes, peppers, and eggplants, to set fruit. Consequently, these crops did not reliably ripen until weeks later than normal. June 2009 was also one of the rainiest Junes since weather records have been kept, with rainfall about 1.52 inches above normal, further causing a delay in many of the summer fruits and vegetables. The cooler early summer weather and large rainfall was, however, a boon for lettuce and other spring greens, which we did not measure.

Yields for mid-summer vegetables, measured in pounds per square foot, were much lower in Camden in 2009 than those we had measured in Philadelphia during the summer of 2008, when temperature and rainfall were relatively normal. The yield for tomatoes, the top crop by weight and value in Camden, was 0.83 pounds per square foot while in Philadelphia the year before it was closer to 2.25 pounds per square foot. From Maine to Virginia, in 2009 tomato plants were ravaged by blossom end rot and especially late blight, which was hastened by the cool, wet weather and decimated production. Still, we

estimate that Camden community gardeners harvested roughly 6,563 pounds of tomatoes worth approximately \$13,126. If the summer weather had been closer to normal with higher temperatures and less rain in June and consequently with similar yields to what we found in Philadelphia in 2008, we estimate gardeners in Camden would have produced approximately 18,500 pounds of tomatoes worth approximately \$37,000. While these figures may be small compared to commercial production or community gardens in much larger cities like Philadelphia, they translate into substantial amounts of high quality food in a place where it is relatively scarce.

TABLE 3: Top Ten Summer Crops Harvested in 2009: Pounds and Servings

<u>CROP</u>	<u>Pounds</u>	<u>Servings per Pound</u>	<u>Number of Servings</u>
Tomatoes	6,562.9	4.99	32,749
Collards	4,829.6	5.25	25,355
Beans	4,227.7	5.55	26,464
Peppers	3,534.6	7.35	25,979
Squash	2,371.7	5.95	14,112
Corn	2,025.3	1.68	3,403
Cucumber	1,579.3	6.2	9,792
Melon	1,335.6	2.87	3,833
Eggplant	1,135.7	3.35	3,805
Pigeon Peas	734.1	2.01	1,677
TOTAL**	30,836.1	4.5***	138,762

*Crop-specific pounds harvested estimated by extrapolating sample weights to all Camden gardens

**Total Pounds include all vegetables and fruits harvested, not just the top ten crops

***Assumed average servings/pound for top ten crops

Table 3 provides information on the yields for the top ten crops as well as the total number of pounds harvested of all summer vegetables. The largest crop, as in community gardens in other cities, was tomatoes, of which Camden gardeners produced an estimated 32,749 servings. In total, Camden community gardens produced 30,836 pounds or roughly 138,762 servings of summer vegetables in 2009. This is enough to provide three servings a day for 365 days for 127 persons. Most consumption of mid-summer garden vegetables in Camden occurs during the heaviest period of harvest, when tomatoes, beans, peppers, squash, and other heat loving crops ripen. This means most are

eaten fresh between June and September, though some gardeners preserve substantial quantities. Still, none of the gardeners we interviewed consumed all that they harvested, and most reported distribution to a large number of people in their communities. Clearly, they were able to provide an enormous quantity of locally grown fresh vegetables and fruit for their neighbors in the poorest regions of the city. It is important to note that these calculations represent significant underestimates. Crops in gardens across the city were tallied only during mid-July to mid-August. The summer growing season is much longer and a growing number of gardeners plant significant spring and fall crops.

Although some experienced gardeners were disappointed by the weather and resulting low yields in 2009 (including the authors of this report), it did not seem to dampen the spirits of Camden's new gardeners. Some churches put in second gardens at the end of the season, and these did not make it into our tally of food production. The following spring, all of the new gardens planted in 2009 were planted again, and most increased the number of gardeners involved. We have rarely experienced the kind of enthusiasm we saw among children, parents, and church leaders at Mt. Olivet and St. Anthony of Padua when the first fruits of their labor matured. At some of the city's gardens, food production is a tool for teaching science and life skills, not something the weather can easily ruin. At Respond Day Care, for example, production was not so important because the garden was an educational tool for teaching children from where healthy food comes. Eve's Garden is primarily a self-empowerment program for pre-teens and teenagers who are otherwise at risk on the streets of Camden. These are intangible aspects of food production that are harder to measure than square feet, pounds, and dollars.

Undoubtedly, food production in Camden gardens is expanding the options, availability, and interest in fresh, healthy, local vegetables. Children and new adult gardeners at especially the faith-based gardens are learning to grow their own and appreciate how carrots taste when pulled straight from the ground. The Garden Club's distribution of broccoli, Brussels sprout, chard, kohlrabi, rutabaga, and turnip seedlings has introduced kids and grown-ups alike to new or rarely tried foods. New immigrants to Camden are growing food they do not readily find – or find at decent prices – in area grocery stores.

Most gardeners we interviewed reported that gardening makes a positive difference in their household budgets. Mexican women in South Camden told us that since they started gardening at their neighborhood church, they had not purchased any cilantro or tomatoes, which they previously bought at \$3.50 a bag. Many gardeners lamented the rising price of food at grocery stores, as well as the fact that the city had just one full service supermarket. The Garden Club's provision of seedlings, seeds, compost, and fencing – along with the fact that no community garden in Camden charges gardeners rent for their plots or use of water – represents a vital support for food production in the city that makes gardening affordable for even the city's poorest residents.

These investments have what economists call multiplier effects. They are witnessed in the growth of plants that people tend and the pounds of food they pick from those plants. They are also manifest in the ways that Camden gardeners distribute their harvest, which reach hundreds and perhaps thousands of people beyond the gardeners themselves. This is the subject of the next and final section of this report.



Harvest at St. Joan of Arc church garden in Fairview (photo courtesy of the Camden City Garden Club).

Distribution and Food Networks

Perhaps the most significant finding of this research is that nearly all community gardeners in Camden share the harvest with people who are hungry. As the garden tour suggests, Camden's community gardeners are by and large quite generous people. They understand the challenges of food access and related health and economic problems of one of the poorest cities in America.

Almost all supported in some fashion by the Camden City Garden Club, the formal and informal networks through which people distribute food from community gardens mirror the diversity of gardens and gardeners themselves. The garden tour section elaborates on these patterns in detail. The following table summarizes the range of institutional and informal distribution patterns and the discussion below briefly analyzes their implications for community food security, wrapping up the narrative portion of this report (appendixes follow).

TABLE 4: Food distribution from community gardens

Within each category, recipients are listed in order of their prevalence in our findings.

INFORMAL DONATION
Neighbors stopping by
Dropping off to neighbors
Strangers stopping by
Basket on front porch or table
At church
Kids eating in the garden
Food cupboards
Friends at the gym
FORMAL/INSTITUTIONAL DONATION*
After church service
Kids taking home from programs, including church programs such as bible class
Food cupboards (mostly operated by faith groups)
Kids eating in educational/childcare programs
Hospital kitchen
SALE
Occasionally to acquaintances and neighbors



Harvest at Paul's Little Empire.

Most community gardeners distribute food to their neighbors, whether from Adopt-a-lot sites, churches, or other sorts of gardens. Many gardeners freeze, some can and dry their harvest, and some share what they preserve. Often the recipients are seniors, people with large families, or people just passing by. Some gardeners leave vegetables in baskets on their porches, making the interface between growers and the people they feed sometimes anonymous, which evidently suits some recipients of food for whom hunger relief can have multiple layers of stigma.

Institutions employ gardening and food distribution for various aims. The 25 new faith-based gardens have organized their gardens and food distribution in diverse ways. They commonly involve parishioners after services, children in youth programs, and people chipping in at different points to harvest, preserve, eat, and give out or take home food.

Some are gardened collectively, others with separate plots assigned to different households. Many of the leaders of these gardens told us they planned to expand the gardens and further connect them to church-based programs, from food cupboards to schools. Many are using their gardens to build closer relationships with their neighbors. Other gardens supported by the Garden Club include a demonstration garden at Our Lady of Lourdes Hospital where the chef uses the harvest in patients' meals, as well as teaching gardens at a range of youth programs and schools.



The demonstration garden at Our Lady of Lourdes Hospital.



One of the teen employees at the Children's Garden teaches a workshop on preserving herbs (photo courtesy of the Camden City Garden Club).

Formal programs and less formal relationships with adults on the block or at church engage children in various aspects of gardening, preparing food, and eating. Children's engagement in community gardens is complemented in some instances by the Garden Club's Grow Lab program in more than two dozen schools in the city. The Grow Lab staff also teaches kids at day care centers about plants, soils, worms, and bugs. One day care center expanded its garden this year with the help of the Garden Club and its AmeriCorps workers. Staff and some parents took home broccoli, chard, collards, and tomatoes. The cooks at the day care center prepared beans from the garden for lunch, with the kids helping to shell the beans.



Harvest at Bridge of Peace Church in Fairview.

The generosity of community gardeners reflects some of the most humane dynamics of city life. Gardeners share seeds, plants, tools, and advice with one another, in addition to vegetables and many other things. Some gardeners consume very little of the food they grow themselves. Often the people to whom they give food are strangers to them, and this does not seem to be an issue with gardeners. Most gardeners we met spoke of this in a matter of fact way. They explained that they gardened as a way to feed people who are hungry, often because it was something with which they grew up.

The people who shared their gardens and their stories with us in Camden illustrate not only the current state of production and distribution, but also key challenges and opportunities of community gardening as a method to grow food security in a very poor city. The recent growth of gardens across the city shows that the Garden Club's model is scalable and capable of supporting a great variety of backyard, community, and institutional gardening and related programs. Although only a small number of people

grow and preserve enough food to last into the winter, the expansion and diversification of the city's population of gardeners promises to increase local food production. At this point, the scope of production in Camden is as significant as the scale. And the distribution patterns revealed in our interviews show that the city's residents are using their harvest to effectively grow and maintain important networks of social support.

Ultimately, community gardens grow more food – and distribute that food more directly to hungry people – than any other form of urban agriculture in the United States today. They distribute food in diverse ways that reflect the diversity of communities and civil society organizations. Gardening can have significant impacts on food access and people's control of important parts of their food supply. In poor places like Camden, gardening is a strategy that many people employ to cope with poverty and its attendant health and social problems. Gardening is labor intensive, but not capital intensive, mainly involving investment of labor and improvement of the soil. It is one of many ways that people work to address the food needs and wants of their families and neighbors, an important part of building healthier, more resilient cities and communities.



Harvest at the Northgate II housing project.

Appendix – Forms used in site survey and interviews

Garden Site Survey

Date: _____

1. Name of garden: _____
2. Location:
 - a. Neighborhood: _____
 - b. Address: _____
 - c. OR: Addresses of adjacent properties: _____
 - i. AND # of parcels from cross-street: _____
 - ii. AND Cross streets: _____
 - iii. Side of street (N, S, E, W): _____
3. Size, layout, & organization:
 - a. **Size of garden – total area**
 - i. Front: _____ ft.
 - ii. Length: _____ ft.
 - b. **Number of Plots** _____
 - i. OR: Collective garden without individual plots: _____
 - c. **Size of one plot**
 - i. Length: _____ ft.
 - ii. Width: _____ ft.
 - d. Apparent **level of use** - % of plots:
 - i. Well-used/maintained: _____
 - ii. Some maintenance: _____
 - iii. Unused/vacant: _____
 - e. **% food** (of annuals & perennials growing, not counting weeds) _____
 - f. Posted **rules**: Y [] N [] (If yes, take notes below on contents of rules)
 - g. **Water**
 - i. City water source/hoses []
 - ii. Barrels/collection systems []
 - iii. No apparent water source []
 - h. Evidence of **support organizations**: _____
4. Trees:
 - a. **Fruit & nut trees**:
 - i. Number and types of food-producing trees (e.g., 2 apple, 1 peach): _____
 - ii. Size (diameter of entire canopy): _____ ft.
5. Other NOTES:

Name of garden: _____

Date: _____

	Crops (square feet)	Notes
General NOTES:		
Beans		
Beets		
Broc./Caulif.		
Cabbage		
Carrots		
Chard		
Chiles		
Collards		
Corn		
Cucumbers		
Eggplant		
Kale		
Lettuce		
Melons		
Okra		
Onion/Garlic		
Peanuts		
Peas		
Peppers		
Pigeon Peas		
Potatoes		
Radishes		
Spinach		
Squash/Zuch.		
Tomatillos		
Tomatoes		
Basil		
Cilantro		
Fennel		
Mint		
Oregano		
Parsley		
Rosemary		
Sage		
Thyme		
Strawberries		
Cane berries		
Bush berries		

Interview questions for community gardeners

NOTE: These questions are a basic guide for an unstructured interview/discussion, and are not intended as a script for a structured interview or survey. Ask broad, non-leading questions first; and ask more specific, follow-up questions to get gardeners to elaborate and clarify. Even if your conversation is brief and people do not wish to delve into detail, please try to have gardeners answer the question(s) about the distribution of harvest.

HISTORY

A good place to start is to ask for a narrative history of the garden – When did it start? How, by whom, and why? How has it changed over time? Have people come and gone?

GARDENERS

Who gardens here? What mix of ages, ethnicities? Are gardeners from the immediate neighborhood or farther away?

Why do these people garden? When did they start gardening? Where did they learn?

How have/do people learn about and get involved in this garden?

ORGANIZATION & SUPPORT

Are gardeners involved in PHS or other formal garden programs? If so, what activities do they attend? What services do they use?

*** At gardens tied to institutions (e.g., churches, housing sites, schools):**

Why did the organization get into gardening? Is gardening connected or related to other programs or activities of the organization?

GROWING

What do people grow? (This is a good discussion to have while touring the garden. You can ask about specific crops and what people do with them.)

How many seasons/plantings do gardeners grow? Do gardeners employ strategies for season extension or maximizing food production?

DISTRIBUTION

What do gardeners do with their harvest?

(For food...) Do they eat it themselves? With others? How do they prepare it?

Do gardeners preserve the harvest (can, pickle, dry, freeze, etc)? If so, do gardeners give any preserved food away? How long into the winter does it last?

Do gardeners give away their harvest through formal programs or informally? How much? What proportion of the food they grow? Particular crops? To whom? To anyone outside of their family? To food cupboards? Only to people they know, or to strangers as well? By what means – e.g., delivered to other households, institutions; others invited to pick; basket put on porch/stoop; at church?

Does anyone ever sell food produced in the garden? Or trade it for anything? If not, why not?

FOOD ACCESS

Where do gardeners and others in the neighborhood shop for food? In the summer? In the winter? Does gardening make any difference in people's shopping or eating at different times of the year? What food do people buy at the store in the summer? How does that compare to the winter? Do gardeners eat vegetables in the winter? If so, which ones? Fresh, canned at home, canned from store, frozen from store, other forms? Are grocery bills lower in the winter, summer, or about the same? Does gardening make any impact on household food budgets?

NEIGHBORHOOD IMPACTS

What impacts has the garden had on the neighborhood?