

**Cultivating Community, Food, and Empowerment:
Urban Gardens in New York City**

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I: Summary

Throughout New York City, urban residents have taken the initiative to use vacant lots for the community's benefit through the creation of community gardens. The benefits reaped range from increased food security through food production, poverty alleviation through creation of urban farmer jobs, open green spaces that serve as community centers to provide educational and recreational services, and environmental services such as serving as pollution sinks and improving air quality. Community gardens have also shown to improve the quality of life for individuals, decrease crime rates, and beautify the neighborhood.

As grassroots initiatives, community gardens serve as catalysts for building social capital and social cohesion by establishing networks that enable collective action. Collective action allows them to challenge negative factors such as crime, and have a stronger voice in what's happening politically and socially in the community. The voluntary participation by local residents in the creation, establishment, and ongoing activities of a community garden instill empowerment and sense of ownership in individuals, which are key ingredients for building healthy communities.

Interestingly, the history of urban gardening in the United States demonstrates a cyclical process of urban garden creation and destruction that moves in conjunction with economic crisis and recovery. Urban gardening in the US dates back to the economic depression of the mid-1890s when the city of Detroit allotted 455 acres of land to 945 families and seed potatoes for planting. The temporary leasing by the city of abandoned land spread to more than 20 cities in the US, but with the increase in real estate development these gardens were short-lived (Hynes 1996). The next revival of urban gardening came with the "liberty gardens" of World War I and then the postwar "victory gardens". These were part of a national campaign to supplement food shortages and "maintain morale on the homefront" (Kurtz 2001). The war gardens were part of a collective effort that reflected the current cultural and national ideals with "an estimated five million gardeners rallying to such slogans as 'plant for freedom' and 'hoe for liberty'" (Hynes 1996). However, once the

immediate need to produce food subsidized so did the government support. Community gardens today in New York City are different in that their purpose is to reclaim and revitalize their neighborhoods in addition to producing food. But, community gardens in NYC are similar to the “war gardens” in that they are experiencing this cyclical process and many are presently threatened by urban renewal development plans. This paper briefly documents this cyclical process in New York City from the 1970s to today.

The main purpose of this paper and of my research is twofold: 1) to identify the multitude of benefits provided by community gardens; and 2) to identify what kinds of management schemes community leaders have developed to manage this collaborative effort. These two aspects will be addressed using data collected during field research conducted in the summer of 2003, literature review, data collected by community garden city agency GreenThumb, and personal experience working as an NGO representative with community gardens. In addressing these two aspects this paper will explore how and why community gardens were created, what benefits and burdens exist, and what some of the key factors are that contribute to the sustainability of community gardens.

This paper first provides some historical context in section II, starting with the initial creation of community garden’s in New York City to their threatened existence today. The paper will then zoom in on the Melrose neighborhood of the Bronx, in section IV, where field research was conducted in the summer of 2003. A description of each of the 10 community garden research sites will follow an outline of the research methods used, in section III. Melrose as a case study serves the purpose of providing empirical data on garden benefits and varying management systems as well as serving as a springboard to extrapolate on generalizable benefits and key factors that play a role in the sustainability of community gardens in general. Section V and VI are dedicated to describing and analyzing specific benefits and burdens of community gardening, and their varying management systems.

II: Sowing Seeds of Reclamation: NYC's Community Gardening Movement

If there is no struggle, there is no progress. Those who profess to favor freedom and yet depreciate agitation want crops without plowing up the ground. They want rain without thunder and lightning. They want the ocean without the awful roar of its many waters. Power concedes nothing without a demand. It never did, and it never will.
-Frederick Douglas (1817-1895), abolitionist, publisher, and former slave.

Background

In the 1970s the Lower East Side of Manhattan was the center stage for a burgeoning urban gardening movement taking place throughout the city. Urban gardens were sprouting in low-income neighborhoods of the Bronx, Brooklyn, and Manhattan in response to a need to reclaim and revitalize a way of life to counter the decaying landscape. The loss of manufacturing jobs to a service-sector industry, the continual movement of the middle-class to the suburbs, and a decaying infrastructure, led to wide-scale abandonment of tenements in the Lower East Side, the South Bronx, Harlem, and Brooklyn. Landlords could not afford to maintain their buildings leading to widespread abandonment, crumbling buildings, and arson. As buildings burned and crumbled, vacant lots full of rubble became eyesores to the community and havens for drug dealers, users, and chop shops for car thefts. In addition, NYC experienced one of their worst fiscal crises in history. Cutbacks in public services affected low-income neighborhoods the worst. By 1977 there were more than 25,000 vacant lots in New York City. Today there are still 11,000 vacant lots, but there are also approximately 650 community gardens serving 20,000 urban residents on 200 acres of open space (Lamborn 1999).

A young artist from the Lower East Side, Liz Christy, was a leader in the urban gardening movement of the 70's. Known as the Green Guerillas, she and like-minded activists began taking over abandoned lots and planting gardens. The city's solution to controlling crime occurring in these vacant lots was to fence them in. The Green Guerillas, armed with wire-cutters, pick-axes, and seeds, took it into their own hands to revitalize the neighborhood by taking control of these spaces that were serving to empower drug dealers and further the heroin and crack epidemic. In 1973, the lot on the corner of Houston and Bowery was one of the first to be transformed into a community garden. This garden is known today as the

Liz Christy Garden and is protected as a permanent park under the Parks Department. This garden served as an example for other individuals who wanted to create a garden. The Green Guerillas became an informal extension resource that provided technical assistance, tools, and seeds to new gardens. In 1978, the Green Guerillas became a non-profit and to this day continues to provide these services as well as community organizing assistance, garden preservation initiatives, and an urban agriculture program.

Liz Christy was also instrumental in lobbying the city government to create a program that would serve the increasing needs of urban gardens and legitimize the use of city-owned land. In 1978, Operation GreenThumb was established as a program under the Parks Department. GreenThumb was authorized to provide temporary leases to gardeners for a flat fee of \$1, under the condition that if the city planned to use the land in the future they would give 30 days notice for gardeners to vacate. Although there were gardeners who disagreed with the institutionalization of their movement, GreenThumb served to protect the rights of gardeners in the face of individuals who wanted to take advantage of an open space for non-gardening related endeavors. In 1998 I was working as a garden coordinator for a piece of land owned by the New York City Public Library on Houston St. Across from the library was a relatively new GreenThumb garden that was being used as a parking lot by a young man who charged his clients to park their cars there overnight. GreenThumb gave him a period of 30 days to get the cars out or the garden's lease would be revoked and the young man would be fined. The man obliged and the few garden members that existed have been able to continue building the garden.

Today there are a number of other non-profit groups that provide services to community gardens including: Bronx Green-Up, Just Food, Neighborhood Open Space Coalition, More Gardens!, and Council on the Environment. There are approximately 650 community gardens in the 5 boroughs of New York City. These gardens average in size from 1000 square feet to 2 acres.

The community gardening movement went through a strong cycle of creation in the 1970s and 1980s, but as NYC's fiscal crisis subsided and both private and public funds increased,

so did the threat to community gardens from developers. Initially these development plans typically included a few gardens at a time, and community gardener resistance occurred politically at the local level. However, this changed when in 1999 Mayor Rudolph Giuliani placed 115 gardens on an auction list for developers' picks.

The Auction and The Settlement

In April 1998, Mayor Rudolph Giuliani's office transferred all of the GreenThumb gardens from the jurisdiction of the Parks Department to the Assets and Sales unit of the Department of Housing Preservation and Development. This transfer facilitated the process of developing on these garden lots and signaled the network of city wide community gardening coalitions to organize a campaign to protect NYC's community gardens. The campaign reached a peak when in January 1999 a few greening groups found out that of 385 city lots put on an auction list 112 of them were GreenThumb gardens. Many of these gardens were started in the 70s or 80s and were established community centers providing an array of services to the community. Community gardeners, greening groups, and garden supporters worked to stop the auction via a number of different approaches. Street protests and acts of civil disobedience became an almost weekly occurrence. These protests served to raise public awareness in local neighborhoods as well as to demonstrate at the steps of City Hall that a strong, organized opposition existed. Green Guerillas along with the Natural Resource Defense Council (NRDC) filed two lawsuits against the city for not following the environmental and land-use reviews necessary to place gardens on an auction list. The Puerto Rican Legal Defense Fund filed a lawsuit on grounds of discrimination against people of color. Community garden coalitions actively sought the support of community- based organizations, elected officials, city council members, and borough presidents.

In May 1999, the day before the auction, the Trust for Public Land and the New York Restoration Project (NYRP), an NGO founded by actress Bette Midler, negotiated with the city the purchase of the 112 gardens for \$4.2 million dollars. These gardens are now protected in perpetuity under land trusts. In this same month, the New York State Attorney General, Eliot Spitzer, filed a lawsuit against the city on behalf of the community gardens.

This lawsuit stated that the city was violating state environmental laws concerning the sale of open green space. The Brooklyn Supreme Court responded by upholding a temporary restraining order on the bulldozing or sale of community gardens. This injunction was just lifted in September 2002 as a result of a settlement reached by the Attorney General and the City, now under the administration of Mayor Bloomberg. One important piece of this settlement is the creation of a Garden Review Process which,

Requires the developing agency to notify the gardeners when it proposes the development or sale of a garden lot and to provide a list of alternate City-owned properties to which the gardeners can relocate if they choose (NYC Community Gardens Agreement 2002).

The settlement also states that 198 of the gardens currently under the jurisdiction of HPD will be transferred to either the Parks Department or a nonprofit land trust organization. But, there are 152 gardens that will remain under HPD and most likely be bulldozed for residential housing or commercial space.

It is worthwhile to understand the varying land tenure systems that exist in New York City for community gardens in order to understand the varying degrees of susceptibility to development. There are approximately eight jurisdictions that a garden can fall under. These are:

- Housing Preservation and Development (HPD) – 152 gardens imminently threatened;
- Housing Preservation and Development (HPD) – 198 gardens under HPD jurisdiction currently being transferred to Parks Department or a land trust;
- Parks Department – 88 preserved gardens;
- Trust for Public Land (TPL) – 63 preserved gardens through a land trust;
- New York Restoration Project (NYRP) – 42 preserved gardens through a land trust;
- Department of Education (DOE) – 110 school gardens;
- New York City Housing Authority (NYCHA) – gardens in low-income, project housing;

- Department of Transportation (DOT) – abandoned lots turned gardens;
- New York City Public Libraries (NYCPL).

(New York City Community Garden Agreement 2000; GreenThumb 2000).

Gardens that fall under TPL, NYRP, or the Parks Department are preserved gardens. School gardens under BOE jurisdiction are subject to changes deemed necessary by the school (i.e. expansion of school building). There are approximately 40 gardens that are under the jurisdiction of NYCHA, DOT, or NYCPL and each fall along varying degrees of susceptibility to development dependent on site specificities. Gardens that in the past have been transferred from HPD to the Parks Department have been successful in this process due to both sympathetic Council representatives and persistent organizing efforts by the gardeners themselves.

Of the 152 gardens that will remain under HPD approximately 26 are in the Melrose neighborhood of the South Bronx. Although there are 11,000 vacant lots throughout the city and thousands of abandoned buildings, many located a few blocks from threatened community gardens, the city still insists that garden spaces are needed for much needed residential space. Peter Marcuse, professor in the urban planning department at Columbia University says,

Even from a market based perspective, this policy doesn't hold water, because everyone knows that property values go up in a community that has a well-kept garden. It doesn't make sense to sell off the gardens before the surrounding properties are developed (Lamborn 1999).

New York City is the city with the least open space per capita in the country. The state's recommendation is 2.5 acres per 1000 residents. In the Lower East Side it is .7 acres per 1000 residents and in Melrose it is less than .25 acres of Department of Parks and Recreation parkland per 1000 residents. In contrast, Boston and Philadelphia have four acres and six acres respectively per 1000 residents (Lamborn 1999; GreenThumb 2003).

III. Field Research Methods

Research was conducted in the summer of 2003 at 10 community gardens in the Melrose neighborhood of the Bronx. The methodological design used was a mixed methods approach. This approach consisted of the collection of quantitative and qualitative data through review of existing data on Melrose gardens, surveys, semi-structured interviews and participant observation. Existing data collected by GreenThumb through surveys will serve to triangulate with data from field surveys and interviews. Initially, informal interviews were conducted with the 10 community gardens. The informal interviews served to identify key factors that contribute to the success and sustainability of community gardens. These key factors were then used as the template for questions in the survey. Put broadly, the questions were:

- Why was the garden created?
- What types of activities and services does the garden provide to the community?
- How is the garden managed?
- How does the garden affect the community?

The key informants for the surveys were the main gardeners from each of the 10 gardens. The main gardeners are those individuals, typically 2-3, whose names appear on the GreenThumb lease. Participant observation at each garden facilitated the identification of additional garden members for semi-structured and informal interviews. Semi-structured interviews were also conducted with key representatives of city-wide greening organizations.

Melrose was chosen as my research site because it is a neighborhood unique in its development scope and contains a sampling size of gardens appropriate to make this research relevant.

IV: Background on Melrose, Bronx

Urban Decay and Renewal

Melrose Commons neighborhood is located in the South Bronx, east of Yankee Stadium, and encompasses approximately 30 blocks in portions of Community Boards 1, 2 and 3 and Community District 17. Melrose is home to some 6,000 people with a median family income of \$12,000 a year. The demographic breakdown is: 66% Latino, 30% African American, 2% Caucasian, 1% Asian, and 1% Other (US Census 2000). In 1990 the city owned 65% of the land and 30% of the housing stock. Ten percent of this housing stock was abandoned in the 1960s and 1970s (Concern 1997). In 1970 the population of Melrose was 21,000 and in 1980 it dropped to 3,000 in part as a result of abandonment and arson of residential spaces, and the building of the Cross Bronx Expressway, which displaced many residents (Birch 1998). Melrose Commons, along with most of the South Bronx, experienced severe urban decadence in the 1970s and 1980s. However, with renewed support from the city government, the establishment of community based organizations and NGOs, and grassroots efforts such as block associations, neighborhood watch groups, and community gardens, Melrose Commons is rapidly changing.

With a pressing need for urban revitalization, the New York Department of Planning and Housing Preservation and Development agency (HPD) began drafting a plan for Melrose in the early 1980s and released a public draft in 1990. Members of Melrose community raised a number of issues with the development plan, but most importantly that they were not included in the drafting of the plan over the past 9 years. Members of the community were determined to have their voice heard in order to create a participatory planning process to draft a new development plan. The organization Nos Quedamos/We Stay was founded to do just this, lead by Yolanda Garcia (AFGE 1995). The main concerns with the draft were:

the affordability of the proposed developments; the in- opportunity for existing businesses to expand; the lack of inclusion of services (health care, senior citizens, youth, libraries) not present in the community; the inappropriateness of the designated open space; the realignment of the street pattern that did not account for the way the streets were actually used; the quality of the proposed construction and the appropriateness of the building materials; and the future of the community for

further expansion of municipal services (AFGE 1995).

The designated open space was to be a four acre public park in the center of Melrose. Residents were concerned that the park would attract drug dealers and create an unsafe environment. After a number of working sessions with members of the community and local politicians four general goals emerged that would guide the planning process:

- to provide a framework for the redevelopment of the area that respects the existing community by bringing the community in as a partner in the development of the plan;
- to provide services - health, cultural and educational, recreational and commercial opportunities that are currently not available and to reinforce those that currently exist and are desirable;
- to support economic development anchored on the existing strengths and successes that community residents, businesses and institutions have achieved;
- to become a desirable place to live and conduct business for individuals from outside the community who wish to locate here (AFGE 1995).

Over the past 10 years Yolanda Garcia and Nos Quedamos/We Stay have developed a collaborative, participatory planning process and are presently in the final stages of drafting a new urban revitalization plan for Melrose.

District 17 contains approximately 27 community gardens. Eight of these gardens are preserved under the Parks Department, New York Restoration Project, Trust for Public Land, or Department of Education (GreenThumb 2003). This leaves approximately 19 gardens under the jurisdiction of HPD, many of which are included in the Melrose Commons development plan. In the late 1990s Melrose gardeners formed the South Bronx United Gardeners (SBUG) coalition with the goal of saving their gardens from development. It wasn't until early in 2003 that Nos Quedamos and SBUG began to negotiate an alternative development plan that would include new housing and the preservation of the gardens. There have been approximately six meetings where key stakeholders are present to try and move forward in creating another alternative development plan. The stakeholders in this process include Nos Quedamos, community gardeners (SBUG), greening group representatives (Green Guerillas, GreenThumb, NYRP, TPL, More Gardens!), local universities, urban planners, Community Board members, and City Council representatives.

However, ultimately the decision as to the fate of these gardens comes down to City Councilman of District 17 Jose Marco Serrano. Recent information from the Councilman's office says he is not going to support the transfer of any of the gardens to preserved status. Just on November 25, 2003 more than 60 gardeners rallied outside Bronx Borough Hall in protest of all the gardens in the Bronx that are still subject to development. As of December 2003 the fate of these gardens is up in the air. It remains to be seen whether some gardens are saved via the new Melrose Commons development plan, via transfer to the Parks Department or a land trust, or whether all the gardens are bulldozed and this 30 block radius's only open space are a few public parks. Unlike community gardens, public parks rarely build a sense of place and ownership, social empowerment, offer educational services, food, or embody a self-organized management system that exists to ensure safety and community inclusion. The differences between open public space and open communal space will be discussed further at the end of section VI.

Melrose Gardens

The remainder of this section documents a brief history and description of each of the 10 community garden research sites. The tables at the beginning of each garden description shows the size of the garden, the year it was started, the area of land that is dedicated to food production, the number of core members, the number of adult members, and the number of youth users. Core members are represented by individuals who are an integral part of the garden on a regular basis. These individuals may be an integral part of the garden by: regularly attending garden meetings, having their own plot, participating in garden maintenance, taking on responsibility for garden activities, organizing events, representing the community garden in the neighborhood whether to solicit support from local businesses or community-based organizations or meeting with local government officials. An adult member is represented by individuals who attend activities and events hosted in the garden but do not regularly play an active role in the same capacity of a core member. Youth users include the number of children from the neighborhood and from local schools who regularly use the garden.

A. Badillo Community Rose Garden

<u>Size</u>	<u>Year Started</u>	<u>Area in food production</u>	<u># core members</u>	<u># adult users</u>	<u># youth users</u>
11,400 sq.ft.	1987	----	20	30	40

A. Badillo Community Rose Garden was started in 1987 by a handful of local community members. The head gardener is Irma Badillo. The garden is beautifully landscaped with a number of ornamental and native trees and bushes. This garden is known for its more than 15 well kept, colorful rose bushes. Members of the community often come to the garden and are free to cut flowers to bring home. The garden hosts Halloween parties, end of the school year parties, and birthday parties. Irma believes some of the benefits provided by the garden are beautification of the neighborhood, control of noise and air pollution, and that it is a safe haven for people to come and get to know each other. She said it is difficult to balance the degree of accessibility offered to the public and the maintenance of control and good management of the garden. The difficulty arises when it comes to granting membership and a key for the garden to an individual who you have just met. The risk is that they see the garden as a safe haven from the police and a secluded place for drinking or drug use. Ultimately this is a challenge that leaders of a garden often face in maintaining a safe environment that is as inclusive as possible.

Edith Community Garden

<u>Size</u>	<u>Year Started</u>	<u>Area in food production</u>	<u># core members</u>	<u># adult users</u>	<u># youth users</u>
5000 sq.ft.	1993	Approx. 400 sq. ft.	15	15	40

Herbie is a retired Puerto Rican man who has been the main contact of the garden since its creation in 1993. The garden is very active in providing children’s activities all year round. They created a program called TAC or Teen Activity Club where teenagers act as leaders for workshops and arts activities for the younger children. The garden owns a 15-passenger van that allows them to organize trips with the children to large public parks, such as Van Courtlandt Park. The van also facilitates the transport of materials to improve the physical

aspects of the garden. The garden became a non-profit with 501 © 3 status in June 2003 for the purpose of raising funds to improve garden programming and the physical structures of the garden. At the rear of the garden is a large performance stage where school children put on dance performances. The garden is famous amongst the school children for hosting an end of the school year and back to school party every year. Herbie says he’s tried to develop a regular partnership with local schools so that teachers can use the garden as a classroom, but that to date it has not been successful. The garden organizes two pig roasts a year where around 100 people attend.

Centro Cultural Rincon Criollo

<u>Size</u>	<u>Year Started</u>	<u>Area in food production</u>	<u># core members</u>	<u># adult users</u>	<u># youth users</u>
8330 sq.ft.	1976	Approx. 4500 sq. ft.	25	Over 100	50

The Centro Cultural Rincon Criollo is an exemplary garden in Melrose and in all of New York City. This garden was founded 27 years ago and today is composed of over 100 members, with 20 acting as active/core members. Rincon Criollo is unique because they are also a music group that plays traditional Puerto Rican plena and bomba music. They are a widely recognized community garden that has been featured at the Smithsonian Institute, the Bronx Council on the Arts, Hostos Community College, and on television shows. The physical aspect of the garden is well organized and colorful. At the entrance there is a 3-dimensional map of Puerto Rico that was carved out of the ground. They have a casita where gourds grown in the garden, hollowed out and ridged to make the guiro instrument hang from the ceilings. Hundreds of photos hang from the walls of famous people who have visited the garden and of events hosted in the garden. The garden regularly provides music, dance, and arts and crafts classes. The arts and crafts objects are sold at events hosted in their garden. Their events range from harvest festivals to dance and music performances where up to 200 people attend. The garden’s intensive food production is done in raised beds, in order to better manage soil quality, and is managed by 14 urban farmers. The harvest goes to the growers, garden members, and donation to the outside community. The garden grows over 20 types of vegetables many of rare and

heirloom varieties, which contributes to the preservation of genetic diversity. The vegetables grown are: squash, cabbage, yautia, beans, peas, collards, potatoes, onions, hot peppers, spinach, okra, cucumber, lettuce, beets, and many herbs they use for medicinal purposes. The garden also has a 20-foot long trellis of grapes, which they harvest and make wine from.

Norma Cruz is the president, and Pedro Figueroa, the vice-president. This garden is sustained by a sense of deep-rootedness, collective ownership, and structured management. This in part has to do with the age of the garden but also with the approach of the leaders of the garden. They believe in camaraderie, tolerance, and acceptance. Their combination of gardening and music creates a space where people feel at home. Rincon Criollo has 501 © 3 status to facilitate funding and their management system is similar to that of an NGO. Regular elections are held for seats of president, vice president, secretary, head of food production, head of cultural activities, head of public relations, and for the board of directors. Fundraising for food production and for cultural events is kept separate. Norma is the third President the garden has had. Jose Soto-Chema, the founder of the garden, was the first President. Following him came Pedro Figueroa, who then stepped down to Vice President 2 years ago to pass it on to Norma. Pedro became a member of the garden just a few years after Jose founded it and Norma has been there for over 15 years. Although each of the three at one time has acted as President, the leadership in the garden is like a lattice net with good distribution of responsibilities (Victor manages garden, Carmelo works with politicians, Carlos is PR person that organizes the musical aspects) and a handful of very dedicated leaders.

Homeowners and Tenants Community Garden

<u>Size</u>	<u>Year Started</u>	<u>Area in food production</u>	<u># core members</u>	<u># adult users</u>	<u># youth users</u>
2465 sq.ft.	1978	Approx. 300 sq. ft.	5	10	10

Carmen Martinez is the main garden contact at the Homeowners and Tenants Community Garden. Her garden is one of the smallest in Melrose and also one of the oldest—started in

1978. The garden is not very visible from the street, snuggled in between two apartment buildings. In the entrance there is a 3-story tall pine tree. Carmen decorates the garden's border with the sidewalk with colorful landscape objects and flowers she says so that the colors catch people's eyes as they walk by and then maybe they'll come into the garden. Her parents started the garden; her father loved nature and was always in the garden. Unfortunately he died recently and the responsibility of maintaining the garden passed to Carmen. She said the garden keeps the memories of her father alive. Although the garden doesn't offer as many organized activities as some of the other gardens and they don't grow food right now because she herself has been sick, Carmen does regularly attend weekly meetings organized by More Gardens! (a grassroots NGO garden activist group founded in 1999) and SBUG (South Bronx United Gardeners). The meetings serve as a space for the gardeners to organize and take action to save their gardens from development and to organize events together.

Latinos Unidos

<u>Size</u>	<u>Year Started</u>	<u>Area in food production</u>	<u># core members</u>	<u># adult users</u>	<u># youth users</u>
9362 sq.ft.	1991	Approx. 6000 sq. ft.	10	25	15

Juan Bolanos started Latinos Unidos in 1991 with the goal of producing food and creating a place to relax. Carmen de Jesus became an additional GreenThumb contact person when she and a few others from the community cleaned up two abandoned lots adjacent to Juan's in the winter of 2003. The three lots compose Latinos Unidos and there are 25-30 people who regularly use the garden. Half of the space is used to collectively grow vegetables: tomatoes, corn, eggplant, beans, squashes, garlic, onion, green pepper, and collard greens. The food is distributed amongst the garden members and donated to the community. The other half of the garden is a communal space with a casita and play area for the kids. They've held events for Mother's Day and birthdays. There are people in the garden everyday from 10-5pm just spending time together, talking, cooking and listening to music. When I asked why she started the garden she responded, "in order to have a space of our own outside of our apartments and to get the kids off the street, away from the

dangers of crime and drugs”. Carmen said the biggest problem they face is a group of heroin users who have built a makeshift wooden shack adjacent to an apartment building and the garden. She hopes that simply the presence of people regularly spending time in the garden will push the drug users away.

Sunshine Garden Association

<u>Size</u>	<u>Year Started</u>	<u>Area in food production</u>	<u># core members</u>	<u># adult users</u>	<u># youth users</u>
14,504 sq. ft.	1998	Approx. 8700 sq. ft.	24	20	30

This garden is under two separate management groups, one lead by Frank Madera and the other lead by Sixto. However, at the time the garden was created these two men along with about 8 others spent almost a full year cleaning what was then a neighborhood dump site. The main purpose for creating the garden was to provide fresh vegetables for the community. Today the garden is divided into two by a 3-foot high fence. The group lead by Frank has a core membership of 14 individuals each with their own key. The garden is open to the public every day from 9am-5pm. The garden cooks dinner every day using food grown in the garden and feeds about 10 people daily. Food is harvested from the garden from late June through mid October. The garden grows tomatoes, eggplant, peppers, green peas, corn, potatoes, radishes, squash, zucchini, and garlic. About twice a year they cook a goat or pig that feeds about 80 people. The fuel for cooking comes from leftover wood that is donated by a local glass warehouse. This wood is used to transport glass but at the warehouse they would otherwise throw it out. The garden also hosts about 30 kindergarten children each week for recreational activities. The 14 core members each have their own vegetable plot, but if someone’s plot needs work, such as weeding or harvesting, and that person is unable to than another member will volunteer to do the work. Decisions about the garden are made democratically at regularly held meetings.

Sixto is the leader of the other side of the garden which encompasses about 40-45% of the whole garden. This section also focuses on intensive food production. Their core membership consists of 10 people. They host both Mother’s Day and Father’s day events

where approximately 25 people will attend. Decisions about the garden are made by the 10 core members.

Vogue Community Garden

<u>Size</u>	<u>Year Started</u>	<u>Area in food production</u>	<u># core members</u>	<u># adult users</u>	<u># youth users</u>
4850 sq.ft.	1994	Approx. 970 sq. ft.	8	14	15

This garden was started by Ivelisse Torres, members of her family, and Father Terry from the neighboring Franciscan Friary Church. Ivelisse and Father Terry created a petition for neighbors to sign in support of pushing the drug users then in the abandoned lot out and turning the lot into a community garden. Their main goal in creating the garden was to keep the children off the streets. The garden offers educational activities for both adults and children. Students from Public School 29 use the garden 3 to 6 times a month. Ivelisse’s mother holds workshops for adults on horticulture. Vogue garden hosts Halloween parties, birthday parties, baby showers, and pig roasts when 50-70 people will attend. The food they produce is distributed amongst members and donated to the community. They harvest eggplants, tomatoes, lettuce, habanero peppers, green peppers, strawberries, raspberries, blackberries, peaches, and grapes. There is not a regularized system of leadership or distribution of responsibilities, everyone shares responsibility and decisions are made by consensus. Ivelisse’s sister in-law, Ivette, said that what makes the garden special are all the memories she holds about her four kids growing up there over the past 9 years. Her husband Carlos said, “it’s important to educate kids about planting, kids need to know where their food comes from”.

Neighborhood Advisory Committee

<u>Size</u>	<u>Year Started</u>	<u>Area in food production</u>	<u># core members</u>	<u># adult users</u>	<u># youth users</u>
5900 sq.ft.	1983	Approx. 250 sq. ft.	10	15	120

Marty and Brother Ed Fallen, who is now the head of a community-based organization, Highbridge Community Life Center, founded this garden in 1983. The garden has 10 raised beds each corresponding to a family or to a local community group or school. To become a member of the garden you are assigned a box and should pay \$5. Members are also expected to participate in fall and spring clean up and attend the regular membership meetings. They hold weekly garden meetings in order to address the needs and concerns of the members and use this time to democratically make decisions. Marty's wife, Francine, is a schoolteacher in the South Bronx. During the summer she coordinates all the youth activities in the garden. Three times a week there are 30 students from a summer program run by the local school that go to the garden for environmental education activities. They hold events for birthdays, 1st Communions, Easter, Halloween, Earthday, Christmas, and also have barbeques. The Mott Haven Prevention Program is housed in the building next to the garden, which works with close to 700 teenage boys. Marty organizes workdays in the garden with the teenagers to build benches, picnic tables, a barbeque, and general maintenance of the garden. Marty believes, "it is important to build relationships with local organizations because everyone is a potential resource for each other". The gardens serve as an anchor for the community to build social networks, to instill a sense of ownership, and to create a safe and lively environment. The garden receives material support via donations from the Salvation Army.

Marty grew up across the street all his life, since the 1940s, and he now works for an organization just next door finding homes for disabled people. This garden was included in the 1999 Auction List, so Marty knows what it was like to be imminently threatened and needing to become politically active to raise awareness about the benefits of the garden. In a last minute resolution Marty's garden was bought by TPL. However, he is still very active in doing advocacy and organizing work in order to save the rest of the Melrose gardens. He believes that, "although adequate housing is long overdue there is the problem of the population becoming saturated." According to Marty the original Melrose Commons plan was beautiful but was so disconnected from the people in the community: who they are, what they want and need, what their incomes are, that Yolanda Garcia started Nos

Quedamos/ We Stay to be the voice of the community for development initiatives. Marty feels that this new initiative can serve as a model of an integrated development plan.

Family Group Garden

<u>Size</u>	<u>Year Started</u>	<u>Area in food production</u>	<u># core members</u>	<u># adult users</u>	<u># youth users</u>
5075 sq.ft.	1996	Approx. 500 sq. ft.	5	30	35

Madeleine Torres and her mother Urbana Diaz started this garden in 1996 to create a safe place for the children and to foster the growth of a green space. As Madeleine says, “The garden serves the community because we need green space to absorb nature, outside there’s nothing but brick, here we can hear the birds and the bees”. Family Group Garden hosts weddings, birthdays, Sweet 16s, baby showers, and other community events. Students from Public School 29 visit the garden and are taught about how to grow vegetables and plants. The garden also organizes children’s workshops for the neighborhood about nature. Madeleine occasionally uses the garden as a day care center where local residents leave their children under her care. In the center of the garden there is a casita. There is a small area in the back of the garden dedicated to food production, which is collectively grown and consumed by members of the garden.

Rainbow Block Association

<u>Size</u>	<u>Year Started</u>	<u>Area in food production</u>	<u># core members</u>	<u># adult users</u>	<u># youth users</u>
5050 sq.ft.	1985	Approx. 500 sq. ft.	10	32	40

The Rainbow Block Association was started Frank Coley and Phyliss in 1985 and Marilyn Rodriguez was one of the members. When Frank and Phyliss moved in 2000 Marilyn Rodriguez became the main contact. Her garden has one casita, an area with rubber mats on the ground and a lawn for children to play and a sectioned off area for vegetables. This garden is no longer threatened by development and is going through the process of being

transferred to Parks or a land trust jurisdiction. The core members consist of 12 people who are all members of Marilyn’s family. There are 20 other regular users of the garden. Their largest event of the year is a Halloween party where up to 200 people attend. Each year they also organize a block party where the whole block is closed off and they cook food and hold children’s activities for the community. The Melrose Community Center and St. David’s Church are two local groups that occasionally use the garden. Marilyn said a lot of people who used to come to her garden have moved to the Sunshine garden (which is just a block away) because they have more space there to grow vegetables. However, they do collectively grow tomatoes, peppers, corn, beans, onions, lettuce, and grapes.

This table represents the sum of the above 10 tables.

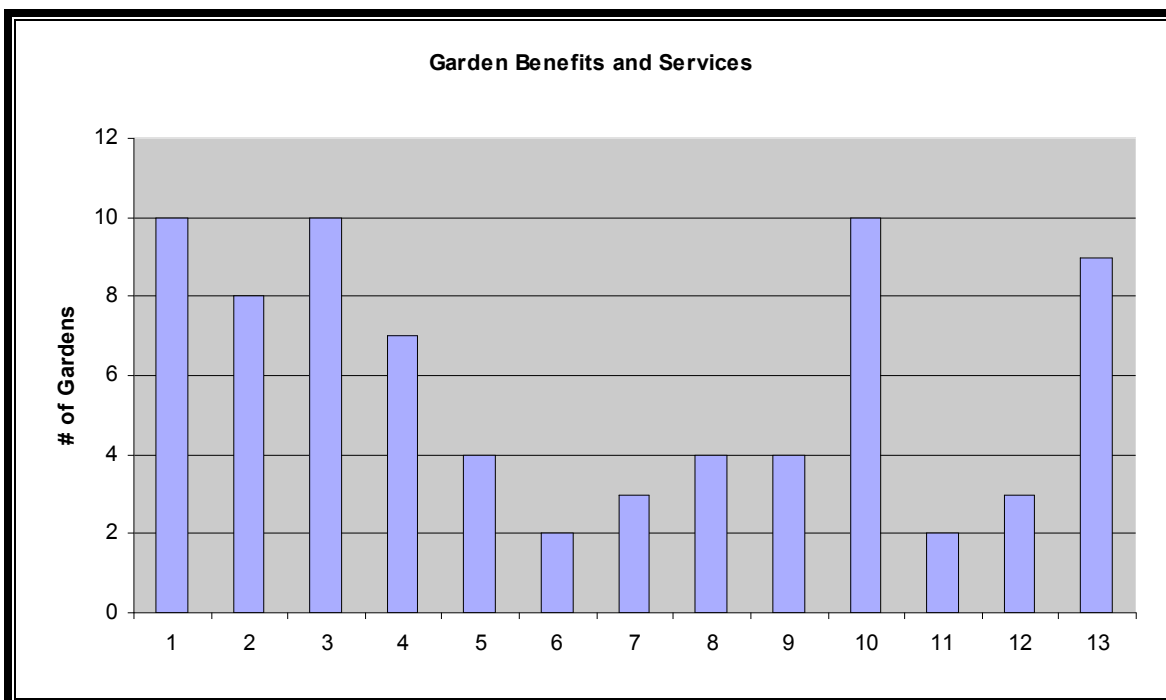
<u>Size</u>	<u>Area in food production</u>	<u># core members</u>	<u># adult members</u>	<u># youth members</u>	<u>Total # members</u>
71,936 sq.ft	22,120 sq.ft	132	341	395	868

IV: Social Benefits and Burdens of Community Gardens

In this section I will highlight the benefits and burdens of community gardens based on my experience as an employee of Green Guerillas in 1999, and from interviews conducted with gardener’s in the summer of 2003. The benefits I will discuss include: education, food security, cultural diversity, community cohesion, and social empowerment.

The following is a graph that summarizes the responses by individual gardeners to questions about garden benefits and services. The x-axis represents the categories of possible responses given and the y-axis represents the number of gardens that responded in the affirmative for each category.

Figure 1: 1- education; 2- school groups; 3- community celebrations; 4- cultural/musical events; 5- link to Community Board; 6- day care; 7- environmental advocacy; 8- field trips; 9- food pantries; 10- garden coalition; 11- health care; 12- neighborhood watch; 13- donate food to community.



Source: GreenThumb Survey 2003 & Fernandez 2003

Education

Some form of education takes place in all 10 garden sites (category 1, Fig. 1). This service is provided both formally, through organized workshops, classes, or trainings, and informally through practical gardening and social organizing experiences. Workshops, classes, and training sessions may be lead by either a community gardener or an outside expert. These sessions may cover specifics about horticulture techniques, organic agriculture practices, food preservation, and community organizing skills. The school group category (2) represents the number of gardens that have an ongoing relationship with a local school. This usually comes in the form of after-school environmental education programs hosted in the garden. As noted by Herbie from Edith Community Garden, it can sometimes be a challenge to develop a partnership between garden and school. There are a number of reasons why it may be difficult including: the school rules about taking kids off school grounds are limiting or there are few teachers able to make the time.

Service as Community Center

Community celebrations (3) take place in all 10 gardens. The following is a list of some types of events held in these gardens: birthday parties, weddings, communions, religious holidays, church mass, summer break and back to school parties, Father's Day and Mother's Day celebrations, baby showers, Memorial Day, Halloween, Earth Day, and summer & winter solstices. Field trips (8) come in many forms as well. Sunshine Garden rented a school bus to take 50 people out to the beach. Edith Garden hosts regular field trips to local parks (e.g. Van Cortlandt) as part of their environmental education program.

Food Security

Nine out of the 10 research site gardens in Melrose donate food to the community (category 13). All of the respondents were firm believers in not selling the produce, but instead donating it to anyone who asks, even if the individual is not a garden member. In this area, where fresh vegetables are scarce and not always affordable, food from these gardens can represent a large portion of a family's source of vegetables. The total area of food production for these nine gardens is 22,120 square feet. This covers 30% of the total area comprised by the 10 garden sites.

A large percentage of community gardens in New York City grow food but the intensity of production and distribution systems vary. Approximately 25 gardens throughout the city sell their produce either via an on-site farm stand or via a farmer's market. Since the produce is being grown on city owned land, the profits must go back into the garden (i.e. to purchase materials). There are approximately 15 gardens who have formed partnerships with local rural farmers and established Community Supported Agriculture (CSA) systems. This rural-urban partnership was initiated by the NGO Just Food in 1996. Through this partnership rural farmers secure a market in New York City where buyers purchase a 'share' or vegetables which are delivered weekly to the community garden throughout the growing season. The vegetable shares consist of produce harvested from both rural and urban farm. However, the majority of gardens in New York City grow vegetables for their own consumption, and/or donate their produce either informally to passersby who ask or more formally to a local emergency food provider, soup kitchen, or food pantry. In many

parts of the Bronx, Brooklyn, and Spanish Harlem fresh vegetables are scarce and not always affordable. Food from these gardens can represent a large portion of a family's source of vegetables.

One of the challenges faced by food production in urban gardens is the uncertainty of the effects from air pollution and soil contamination. Air pollution in the South Bronx is quite high due to the proximity of a number of major highways, JFK and LaGuardia airports, and the lack of trees that serve as pollution sinks. However, there is scarce information documenting the effects of air pollution on vegetables and in turn on human health. Soil contamination is another issue with cultivating vegetables in urban areas. Lots where buildings were burnt tend to have high levels of lead. Community gardens confront this issue by constructing raised beds and bringing in uncontaminated soil from elsewhere, usually donated by GreenThumb or Bronx Green-Up. Many gardens also make compost from leaf litter and food scraps to replenish the soil. But it is uncertain if leaching is occurring and whether the roots are indeed uptaking these toxins.

Reflecting Cultural Diversity

“At the heart of people's struggle to define themselves and to combat alienation, community gardens provide a way to take control of an image, to be involved in something larger than immediate life, and yet to remain on one's home ground” (Von Hassel 157).

Community gardens provide a space for public expression, which results in a patchwork of gardens throughout the city ranging from ones that barely have plants but are packed with old refrigerators, electronics, and a table to play dominoes, to more organized gardens with fountains, pathways, and ornamental plants. But, when one walks into a community garden there will undoubtedly be some representation of the ethnicity and culture of the gardeners. In the 70s and 80s, when many of these gardens were built, the dominant cultures in these low-income neighborhoods were Puerto Rican, Dominican, African American immigrants from southern United States, and white American artists and activists. A physical structure that has become an integral part of Puerto Rican and Dominican gardens are *casitas*. These are closed in wooden structures that serve as tool sheds and as indoor gathering spaces. They are usually painted with typical vibrant Caribbean colors of pink, yellow, blue, or

green. Casitas come from the traditional Puerto Rican structure called *bohios*, which are thatch roofed homes in the middle of small farms.

Although some gardens are fairly homogenous in that the members are immigrants from the same country, there are gardens that are more diverse. The Garden Of Happiness in the Bronx has members of Mexican, Puerto Rican, and African American descent. In this garden you'll find corn and cilantro beds grown by Mexicans next to beds of collard and mustard greens grown by African Americans. As cited in Kurtz 2001, Warner 1987 found that "gardens serve as a medium for the transport and translation of cultural practices that concern both nature and food" (pg. 659).

Strengthening Community Cohesion

In the South Bronx, just a few blocks from Yankee Stadium, is one of the largest community gardens in New York City covering 1.5 acres of land. Taqwa Garden is managed by Abu Talib, his wife, son and 90 families who collectively maintain the garden. Most of the members over the age of 40 grew up in Georgia and moved up to New York City in the 70s and 80s. Their focus is on intensive food production for their community where it is almost impossible to find any fresh fruits and vegetables. On any given night in the summer you can go into the garden and expect to see someone roasting vegetables on the grill. They also provide environmental education to children through an after school program. A garden just two blocks away called Casitas, is predominantly Puerto Rican and Dominican. Their garden is a quarter the size of Taqwa but also dedicates their space to intensive food production.

After working for a few months with both these gardens I noticed the lack of interaction between the two. I organized a food preservation workshop at Taqwa and invited the members of Casitas to go. A few were reluctant because of underlying racial tensions that characterize neighborhoods where blacks and hispanics live side by side. A few members of Casitas did attend the workshop but there was limited interaction between members of the two gardens. A few months later Jose Serrano, a member of Casitas called me to inform me that some kids from the neighborhood set his tool shed on fire. At this point

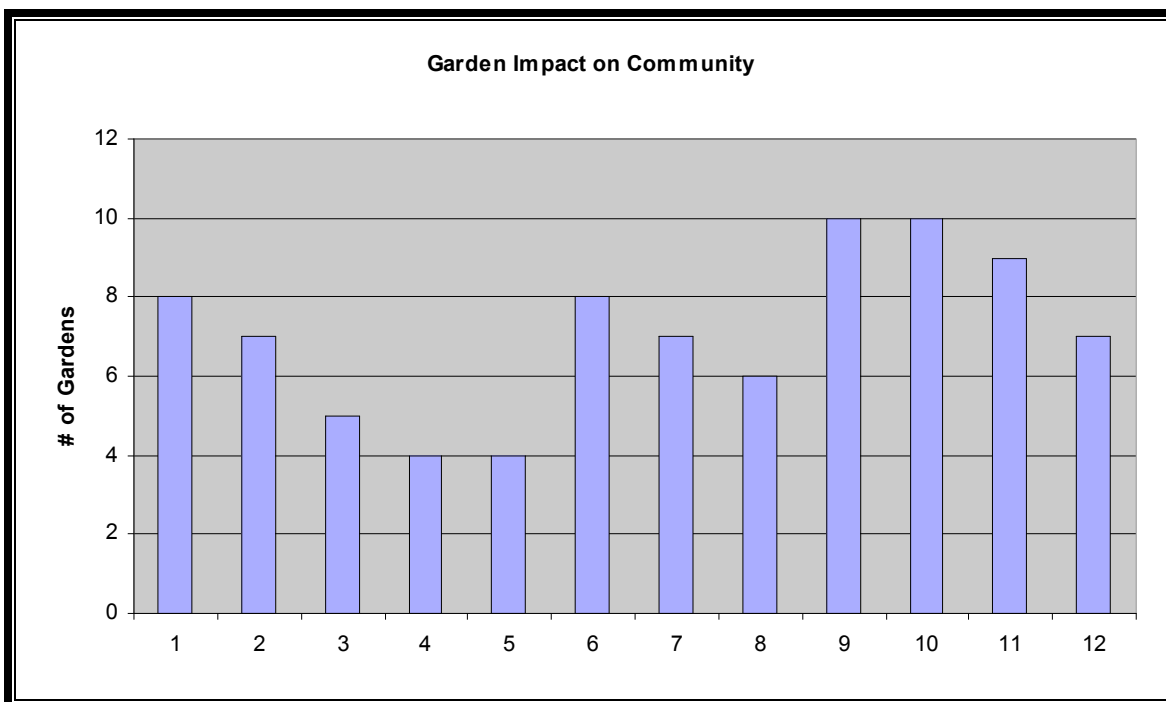
GreenThumb provided the wood to rebuild the tool shed. A few days later I received a call from Jose Serrano telling me that Abu Talib and a few other men from Taqwa showed up to their garden and helped them build the tool shed. It may have been just as simple for me to organize a group of outside volunteers to do the work for them, but sometimes with less interference by an NGO there is more room for solidarity building within the community.

The 1999 Auction was a blessing in disguise for building social networks because of the increased political and social organizing work done by gardeners and their supporters in response to this crisis. Gardeners began to solicit letters of support from community based organizations, were setting up meetings with their local politicians, and were forming garden coalitions with other community gardens in their district, borough, and city-wide. All the 10 garden sites are part of the South Bronx United Gardens coalition. This represents a social network that serves multiple purposes – from technical, material and labor exchanges to a space where members of the community can discuss any issue at hand.

People’s dedication to community gardens is a linking force between groups of people who otherwise would have little in common with each other. Community gardens serve as platforms for increased involvement with local community boards and other community based organizations like cultural centers, churches, and schools.

The graph below summarizes the responses to questions about individual perceptions as to how the garden has benefited the community. Most of the categories had a high positive response rate. This is not surprising given the fact that respondents experience the changes that have happened in their community as a result of the garden every day. In addition, this positive response rate serves as an indicator of the level of social empowerment attained by these individuals and as a community.

Figure 2: 1- area around garden improved; 2- builds network of people/trust; 3- creates democratic space; 4- attracts economic development; 5- serves as a cultural center; 6- encourages neighborhood pride; 7- inspires others to positive action; 8- provides educational experience; 9- adds nature to area; 10- stabilized block; 11- create safer streets; 12- provides food.



Source: GreenThumb Survey 2003

Empowerment is a term that is widely used, across disciplines, and hence embodies a number of different meanings. In this context empowerment is defined as the ability of an individual or group of people to effect positive change (Westphal 2003). Although community gardeners and supporters of community gardens point out social empowerment as a key benefit of community gardens, it is quite difficult to measure. The indicators used by Westphal in her study of empowerment in urban gardens are, “efficacy, mastery, control, new resources, participation, increased skills, proactive behavior, critical awareness, sense of competence, shared leadership, meeting organizational goals, key brokers in decision making, extended influence, connections to other community groups, and responding to threats to quality of life” (pg. 140). In addition to these indicators I add: belief in one’s ability for self-determination, individual and cultural pride, hope for the future, and a strong sense of place and ownership. As seen in Fig. 2 eight gardens believe that garden encourage neighborhood pride(category 6) and seven gardens believe it inspires others to positive action (category 7).

V: Management Schemes and Garden Lifecycle

The management systems of community gardens in New York City are locally self-organized and uniquely site specific, resulting in an array of different management approaches. In looking at the citywide management of community gardens there is no top-down management imposed by the city agency, GreenThumb, or NGOs like Green Guerillas, Bronx Green-Up, or Council on the Environment. GreenThumb is the only organization that maintains contact with all of New York City's community gardens because they hold leases to all the gardens. This is the closest that any greening organization comes to ownership, except for those that offer land trusts. GreenThumb enforces basic guidelines that include 1) GreenThumb signage 2) public access 3) open hours 4) events and programming 5) membership list 6) maintenance and 7) keys. (See Appendix 1). These guidelines are in place to ensure that the garden serves as a community resource and is accessible to interested parties. Each garden has the right to determine their management scheme and organizational structure. The organizational structures of community gardens differ from one to another. The way a garden is managed depends on a number of factors including: what the goals of the garden are, what type of garden it is (i.e. children's garden, food production garden), how many members there are, who those members are, and what kinds of activities take place in the garden. For example, for both Sunshine Garden and Rincon Criollo food production is a priority. Both gardens assign plots to individuals or households to manage. Often there will be an individual designated to certain responsibilities such as food production or children's activities. This style of management fosters diversification of partnerships outside of the community garden. Instead of one person being responsible for linking the garden with a food pantry, a local school, and the community board, different members act as representatives of the garden to the community.

The Role of Participation

The dialectical process that NYC's community gardening movement has experienced over the past 30 years sheds light on the instrumentality of participation by the community in creating a successful garden and by NGOs in legitimizing, many times falsely their work.

The gardening movement came out of a will and motivation by individuals in the community who saw in these abandoned lots havens for control of the community. Those taking advantage were the drug dealers who claimed these spaces as their territorial platform for their business endeavors. Members of the community saw the need to take control of these spaces as a starting point for the reclamation and revitalization of their neighborhoods. The sense of ownership present in a community is dependent on what level and what kind of participation is present in the creation of a place. Community participation in the creation of these gardens has been voluntary and often times non-hierarchical in its implementation. The individual, personal decision to directly take part in such a community effort builds agency. Seeing the positive results of your actions is empowering and builds a strong sense of ownership. When there are a number of outlets for participation in a garden, the garden will attract more types of individuals from the community. Whether the outlets include a space for concerts, theatre pieces, exhibiting sculptures, holding weddings, growing food, growing flowers, for a playground, or simply a tranquil escape from a hectic city life, this diversity increases inclusion. The creation of spaces that foster cultural and individual representation and expression are essential to the long-term success of a garden. The historical continuity and memory are what make the gardens strong and able to provide services and make it a place that people in the community want to be.

An experience I had working as a community organizer for Green Guerillas demonstrates that participation by community members in the creation of a community garden is essential to the emergence of core leaders that will in turn develop a management system that fits with those garden members. It was always a concern amongst our staff to make sure the services we provided, whether community organizing assistance or horticulture assistance, involved true participation and representation. The decision-making process and leadership had to emerge from the community members. Our role as community organizers was to instill motivation and provide support but not be central to the process. This approach puts the responsibility in the hands of the gardeners and does not create a relationship of dependency or charity characteristic of many philanthropic programs. The

project I worked on, The City Farms, was an initiative to help increase food production in gardens and build partnerships between gardens and emergency food providers.

One of the gardens that asked for assistance from us was owned by a community-based organization and under the jurisdiction of the Parks Department. This garden was part of a program started by the Parks Council called the Success Gardens. Citywide employees of the Parks Department or AmeriCorp volunteers built a total of 10 Success Gardens in NYC. Over a million dollars was put into each of these gardens with the motto that “If you build it, they will come”, the “they” referring to the community. According to a community organizer from GreenThumb, all of the Success Gardens were “failures”, precisely because of the lack of community participation in the creation of the garden. Americorp or the Parks Council spent a few weeks building paths, raised beds and planting flowers and perennials. The finished product was a beautiful garden that lacked any character because community members did not build it. When I asked people in the neighborhood if they were interested in having a plot in the garden to grow food they said that the garden was not theirs and they weren’t allowed to work in there. When I told them that it was a community garden, which meant that they did have a right to use it, the typical reaction was a look of confusion and disinterest. The disconnection that exists between community members and their notions of accessibility and ownership is difficult to bridge when their hands were not a part of the creation of the space.

Although community gardens are an asset to inner-city neighborhoods, the potential to reap these benefits is dependent on the individuals who choose to be leaders or core members and the individuals who choose to get involved at a different capacity. As described in section IV, there are differing degrees of participation by community members in these gardens. I’ve described the difference between core members and adult/youth members. Core members can be broken down further into core leader(s) and supporting leader(s). Adult and youth members can be broken down into active members and garden users. The existence of both core and supporting leadership allows for the institutionalization of leadership succession. If there is only one individual present, representing the core leadership with no supporting leadership, the likelihood that there

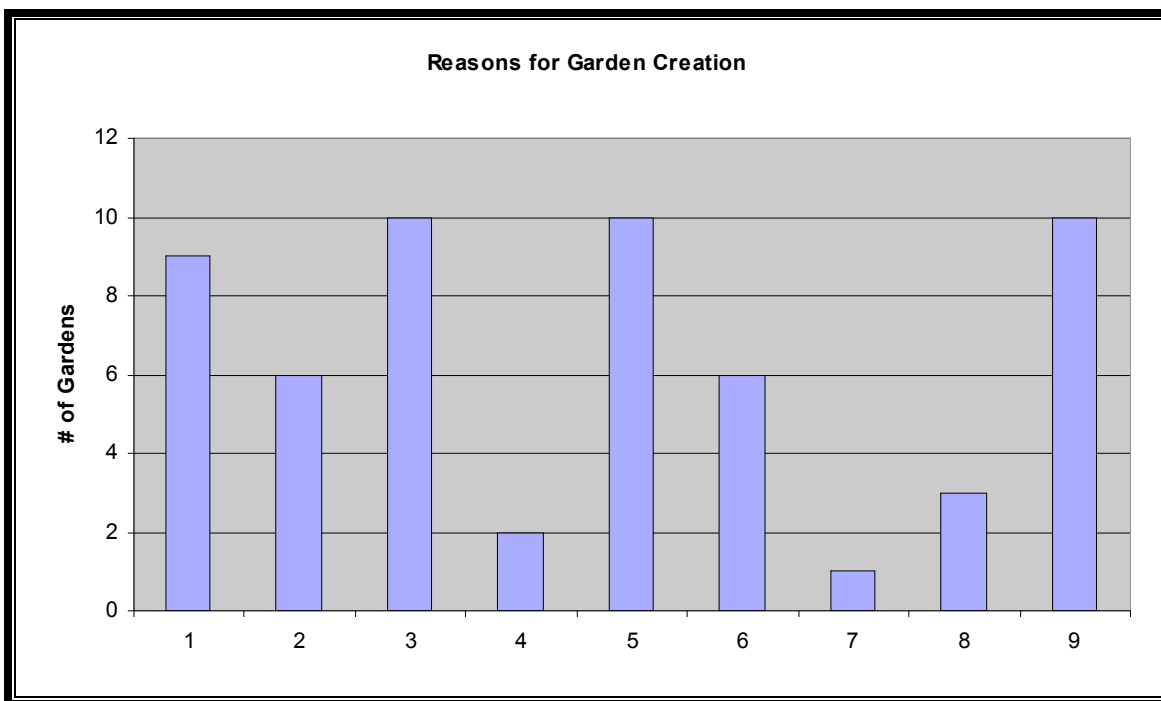
will be a rotation or replacement of leadership is small. If something were to happen to that individual leader (i.e. leave the neighborhood, illness) the management system and hence the garden will suffer. This is not to say that gardens that do not have this extension of leadership are not providing an array of benefits to the community, but it does mean that this safety net does not exist therefore increasing the risk and decreasing the security to the long-term sustainability of a garden's life. In addition leaders of a community are empowered individuals. As cited in Westphal 2003, Zimmerman 1995 describes the *empowered* as those who have attained skills and control, while those who are *empowering* are "able to foster empowerment in others" (pg. 667). This is an important characteristic for leaders. They should be empowered and empowering, able to instill pride and motivation in others. Social realities of communities are most empowering and equal when they are least integrated but have multiple leaders (Geertz ???). The existence of multiple leaders is a key element to ensure leadership succession.

The reasons for why a garden is created is also an important driver in how a management system may be organized. As Kurtz describes,

The differences in whether a garden is envisioned and created as a play area for children, or as a working area for the supplemental provision of food has important implications for how social relationships are formed around the nexus of the garden (pg. 667).

The graph below summarizes the responses by individual gardeners to reasons for garden creation.

Figure 3: 1- beautify the neighborhood; 2- create/improve green space; 3- create place of relaxation/peace; 4- economic development; 5- for children; 6- environmental restoration; 7- in honor/memory of a person; 8- provide food; 9- safe place off the streets.



Source: GreenThumb Survey 2003

The highest number of responses for the gardener’s motivation to create the garden are: (1) to create a place of peace and relaxation, (2) for the children, (3) to have a safe place off the streets, and (4) to beautify their neighborhood. The correlation between (2) and (3) above is strong because most gardeners expressed the fact that the children of the neighborhood have very little space to learn and play besides their small apartments or the streets, where there is the danger of being lured into using drugs or other illicit activities.

It is notable that only 3 gardens responded to the fact that the production of food was a motivating factor in creating the garden. This is surprising because out of the 10 gardens 9 dedicate some area of their garden to food production. However, in Figure 2 we saw that 7 gardens emphasize the importance of food production to the community. This low response rate in Figure 3 may be attributed to the fact that food production was a second step in the development process; the first stage was to clean the abandoned lot and create the infrastructure to support an aesthetically beautiful landscape that creates a sense of peacefulness.

Management Types

Below is a table of some management characteristics and how many of the ten gardens have these characteristics.

Regular meetings	6	Elections	2
Garden rules	7	Bank account	4
Bylaws	4	501 c 3 status	2
Board of directors	3	Leadership succession	8
Officers	2	Multiple leaders	7
Committees	2		

Source: GreenThumb Survey 2003 & Fernandez 2003

Management characteristics vary widely between the 10 gardens surveyed. This is related to both different approaches to a community-oriented system and the lifecycle of the garden. Most of the gardens have set up systems of management that include garden rules, regular meetings, and a system of leadership succession, which is closely linked to having multiple leaders. However, other categories in the questionnaire had little representation. To some extent this has to do with the lifecycle of the garden. The two gardens who have officers, committees, elections, and 501 c 3 status are older gardens that have stronger roots in the neighborhood and have therefore been able to develop more sophisticated systems of management. This is where the coalition benefits those gardens who are in earlier stages of development and may learn lessons from each other about what works and what doesn't when managing common property.

In some gardens things happen more organically and informally-if someone wants to do something they take the lead and make it happen. This type of informal management system is the case for gardens who's core members are members of the family: Vogue Community Garden, Family Group Garden, and Rainbow Garden. Their management system may appear to be informal but is actually an extension of the already defined family social relations of individual's roles and decision making powers. In addition, it may not be necessary to hold formal meetings if issues can spontaneously be discussed over a shared meal. Sunshine Garden is not comprised of family members in their core

membership, and although they hold regular meetings, there is room for spontaneous action. Quito at the Sunshine garden explained this to me when I asked if specific people have specific roles like the cook, or the children's activities coordinator. He said that whoever is inspired to coordinate something they come to the core group for the okay and to ask for help from others and then go ahead and cook a big meal or have an outside group use the garden.

Another interesting difference between gardens is the way the beds are managed and how that is reflected by the main activities that take place in the garden. There seems to be two main categories: each bed privately managed by individuals or families OR all beds managed collectively. The ones that are collectively managed tend to be smaller gardens in terms of membership size and area, are more focused on youth activities than food production and are managed by an extended family: Family Group, Rainbow Garden, and Vogue Garden. There are three gardens that allot beds to individuals or families: Neighborhood Advisory, Rincon Criollo, and Sunshine Garden. Both Rincon Criollo and Sunshine Garden are intensive food producers. Although the Sunshine Garden has boxes assigned to individuals Quito was telling me that when someone's bed needs weeding or water and that person is not there than someone will take care of it. The food is also harvested and distributed without notice of whose box is whose. Most of the beds at Neighborhood Advisory are planted with ornamental bushes or flowers, therefore the labor for maintenance is minimal and there is no need to develop a food distribution system.

From the discussion above there seems to be two general categories that the ten community gardens could fall into: *communal* or *community*. This raises issue about the number of different meanings community embodies. But, for the purposes of this paper, communal style garden are one's with a smaller network of people managing the garden, typically consisting of family members, offer a less diverse array of activities for the community, and have less connections externally. This is not to say, however, that these communal gardens are not providing benefits to the community, just that their target nexus is smaller than that of a community garden. So, in comparison, a community garden is one

that consists of a larger, more developed management system, that provides more types of activities, and that has more links with outside entities.

VI: Conclusion

As grassroots initiatives, community gardens serve as catalysts for building social capital and social cohesion by establishing networks that enable collective action. Collective action allows them to challenge negative factors such as crime, and have a stronger voice in what's happening politically and socially in the community. The voluntary participation by local residents in the creation, establishment, and ongoing activities of a community garden instill empowerment and sense of ownership in individuals, which are key ingredients for building healthy communities.

As an integral part of a garden's lifecycle it takes time to cultivate leadership, to establish a management system, to physically create a beautiful space, to build membership, and to build trust and cooperation among members. Some of these factors are an ongoing process that any community based effort will always have to be working at, changing and adapting to the changing needs of the community. Management systems are dependent on what the goals of the garden are, what type of garden it is (i.e. children's garden, food production garden), how many members there are, who those members are, and what kinds of activities take place in the garden. But, it is difficult to conclude whether a garden is the way it is, with a certain type of management system, providing the services it provides because of the people inside it or the block it's on or the garden's size and physical characteristics. A garden's purpose and benefits will vary according to the communities needs, but it goes much beyond that. Although it makes sense that a community garden would fill the community's needs where possible and be a reflection of the community, it also has a lot to do with the few individuals running the garden—what their interests are, how much time they have, how willing they are to share power and responsibility, and if they are empowering individuals.

After examining the array of benefits provided by community gardens and exploring the different types of management systems created by garden members, some key factors that

play an important role in encouraging sustained and successful community based efforts emerge. These factors are generalizable to community gardens city-wide and also may contribute to understanding community-based natural resource management systems in general. These factors include:

- History of creation of garden;
- Primary purpose of garden, main activities;
- Management schemes: leadership succession, how many leaders are there, decision making process, distribution of responsibility (coordinating activities, maintenance of vegetation, etc.), basic rules, new membership procedure;
- Links with other community based organizations, schools, churches, local businesses;
- Relationship with local politicians (Community Board, City Council);
- Availability for public use (i.e. open hours, diversity of activities);
- Existence of empowering, democratic leaders;

Community gardens are open green spaces that can play a central role in the social fabric of a neighborhood. Individuals depend on these gardens for basic human needs such as fresh food, open space, and as a social center. As discussed in the summary, history demonstrates the persistence of a cycle of creation and destruction with urban gardens in the United States that moves in conjunction with economic crisis and recovery. The difference between the war gardens of the past and today's urban gardens is that the war garden's primary purpose was to provide supplemental food, while today's urban gardens are multi-purpose open green spaces. Another difference is that the war gardens were initiated and supported by the government, while urban gardens in New York City have received little support and have had to resist the city's efforts to bulldoze them. These reasons may be why this cycle of creation and destruction is changing and the cycle is beginning to spin in a direction that sees urban gardens as an integral part of the city landscape.

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Appendix 1

GreenThumb Regulations

Please read retain and abide by the following requirements:

1. GREENTHUMB SIGNAGE

The garden must post the new GreenThumb sign, which includes the name of the garden, and the name and telephone number of the GreenThumb contact for that borough.

2. PUBLIC ACCESS

The public must be allowed to: a. Become members of the garden, or names must be placed on a waiting list b. Hold events in the garden c. Attend events in the garden d. Visit the garden during open hour sessions

3. OPEN HOURS

Since the garden is a community resource, the garden must remain open to the public for a minimum of five

daylight hours per week between the months of March and November. Public access hours must be posted

outside the garden, along with the name and telephone number of the garden's contact person, or the name and telephone number of the GreenThumb Outreach Coordinator for the garden. The garden must be open during the posted hours.

4. EVENTS AND PROGRAMMING

The garden group is expected to hold at least one public event per gardening season.

5. MEMBERSHIP LIST

The garden group must provide GreenThumb with a list of all garden members, including addresses and phone numbers when available. This list will be used only for mailing purposes and to estimate the number of gardeners citywide.

6. MAINTENANCE

The garden group must keep the garden well maintained.

This includes:

a. Maintaining the garden and all plants and structures in a safe and usable condition, including all fences, raised beds, tables, benches, and other ornamental items.

b. Keeping sidewalks, passageways, and curbs adjacent to and within the garden clean and free from snow, ice, garbage, debris, and other obstructions.

c. Removing all trash from the garden.

7. KEYS

Gardeners must provide GreenThumb with a current key or combination to the garden. If the lock has been

changed you must provide GreenThumb with a key as soon as possible. This will enable GreenThumb to

deliver supplies more efficiently and assist in case of an emergency.