Sowing the Seeds of Success: Cultivating a Future for Community Gardens
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1 Introduction

Whether providing sustenance during the World Wars, an avenue for grassroots activism in the 70s, or a local food source for a modern world focused on "sustainable" living, community gardens have proven adept at conforming to societal needs. Today, community gardens are implemented by a great range of organizations seeking to reap the community building and food security benefits commonly attributed to their success. The further proliferation of community gardens is likely to persist as the urban landscape in the United States continues to expand and a growing population realizes the benefits of community gardens.

Research has shown that community gardens have the potential to provide far reaching social, political and environmental benefits to both the direct participants and the ancillary surrounding community. Despite these benefits, community gardens often face a wide range of obstacles that can affect their long-term viability. At the root of the problem is that the gardens have historically been thought of and treated as an interim land use quickly being reclaimed by opportunists seeking economic gain. This attitude is beginning to change; as community gardens become more mainstream people are increasingly seeing them as a permanent and valuable part of the urban landscape. As such, the following paper seeks to determine process and necessary facilities which can help ensure the future success of a community garden.

2 Defining Community Gardens

The term "community garden" came into use around World War I and initially referred to both collectively grown gardens and gardens with individual plots (Lawson, 2005). Over time people began associating the term community garden with "neighborhood gardens in which individuals have their own plots yet share in the gardens overall management" (Lawson, 2005, p. 3). Today the American Community Gardening Association defines community gardens more broadly as "any piece of land gardened by a group of people" (American Community Gardening Association [ACGA], n.d., What is Community Garden? section, para. 1). This definition encompasses the variety of functions community gardens are used for today including: neighborhood gardens, school gardens, therapeutic gardens, public housing gardens, demonstration gardens, job training gardens and children's gardens.

Because of their wide appeal, community gardens can be found in a diverse range of locations. Although there are community gardens in rural areas, they are typically thought of as an urban land use. Land utilized for creating community gardens can be vacant, or community or privately owned. For example, community gardens have been created at schools, healthcare facilities, housing complexes and parks.

3 Benefits of Community Gardens

Gardening has consistently ranked as one of America's most popular leisure activities, yet has been overlooked as a use to be incorporated into traditional parks systems (Francis, 1987). Community gardens serve as a means to bring gardening to those that do not have access to land or to the resources necessary to create their own garden. Community gardens can have far reaching benefits for both the people directly involved in the gardens and the surrounding community. The participation and organization involved in developing and organizing the gardens often helps to create a sense of togetherness that can lead to positive neighborhood changes. The ability of community gardens to meet and enhance the economic, social and environmental needs of a community is the reason why the gardens are being embraced by a wide range of community organizations (Lawson, 2005).

The primary economic benefit of community gardens is that they subsidize grocery expenses. The crop size and thus the amount of grocery bill savings are directly correlated to the size of the plot, how intensely it is cultivated, and the climate (Sommers, 1984 as quoted in Herbach, 1998; Patel, 1991). A conservative estimate is that a family can save approximately $475 a year (Sommers, 1984 as quoted in Herbach, 1998; Patel, 1991). In addition to the savings, which can be a tremendous help for many families, community gardens provide people with fresh produce that they may not have otherwise been able to access. At a larger scale, local governments can also benefit from investing in community gardens because the development and maintenance

costs of community gardens are typically less than that of traditional parks (Herbach, 1998). Aside from the found savings, investing in community gardens also increases the park system's user base because many people interested in gardening are not otherwise served by traditional parks (Francis, 1987).

At the most basic level, community gardens provide an important social benefit by supplying participants with access to a secure food source that is fresh and locally grown. This is particularly crucial for poor neighborhoods that are often discriminated against by large grocers. A lack of grocery options can ultimately limit people's ability to access fresh and inexpensive produce (Morland, Wing, Roux, & Poole, 2002). Beyond that, gardening has the ability to "enhance a persons psychological, spiritual and physical sense of well being" (Sommers, 1984 as quoted in Herbach, 1998, People and Place Enhancing Benefits section, para.1) as well as reduce stress levels (Howe, Viljoen, & Bohn, 2005). In addition, gardens offer ethnic minorities a place to "express their local and ethnic identity" (Howe, Viljoen, & Bohn, 2005, p. 57) by having the ability to grow specialty food items not otherwise available and, for some, to connect with their agrarian cultures (Friends of Burlington Gardens [FBG], 2005).

Aside from individual benefits, community gardens are also widely believed to have far reaching community benefits. Perhaps the most publicized benefit of community gardens is the effect that they can have on helping to create a sense of place and community pride within neighborhoods (Herbach, 1998). Community gardens often become central neighborhood meeting areas and event spaces (Naimark, 1982). Having a space where neighbors can meet others and socialize increases social networks within the community (Kingsley & Townsend, 2006). Social networks along with community and a sense of place are key elements of social capital (Kingsley & Townsend, 2006). Increasing a communities social capital helps to empower the individual (Kingsley & Townsend, 2006) and increases the "ability of a community to take interest in and to shape its own future" (Iles, 2005, p. 85). This often results in community activism and a commitment to enacting other positive changes within the community (Lawson, 2005). In lower income and neglected neighborhoods, the activism that comes from participation in a community garden can be enough to turn the neighborhood around and give residents a new hope for the future.

The environmental impact of community gardens is perhaps the most visibly evident benefit. Often, the gardens are located on polluted vacant lots in urban areas that would otherwise be left in disrepair. Community gardens help to beautify these sites and add greenspaces to blighted urban areas. The gardens also help reconnect people with natural processes; this in turn makes them more aware of their surroundings and increases their desire to protect the environment, particularly in the immediate area of the garden (Naimark, 1982).

4 History of Community Gardens

The roots of community gardens in the United States grew out of Detroit at the end of the 19th century. In 1894, during a depression that lasted from 1893 to 1897, Mayor Pingree sought to relieve the urban poor of Detroit by implementing the use of gardens both to provide food and to improve the morale of unemployed laborers (Lawson, 2005). News of Pingree's success spread throughout the country and began a national movement (Lawson, 2005). The social and political atmosphere at the time was focused on urban reform and beautification. Policies of this time were born out of a growing awareness of the negative impact that industrial expansion of the 19th century was having on the health of America's cities and the people living in them (Lawson, 2005). Evidence of this awareness is seen in the community gardens initiated during this time period. They were thought to help make cities healthier and more livable and urban citizens physically and morally improved (Von Hassell, 2002). Although urban gardens were widely embraced during this time, they were also viewed as a temporary gesture to help the poor until the economy recovered or until they were able to move on to new careers (Von Hassell, 2002).

Years later, as World War I took hold of the nation, people again turned to community gardens as a means of relief. During the war, America was shipping food overseas to support the allied troops and the gardens were used to supplement the domestic food supply (Lawson, 2005). The gardens became known as liberty gardens because they were promoted as a way for Americans at home to show their support for the

war efforts. Like relief gardens before them, liberty gardens were promoted and supported through national campaigns (Lawson, 2005). Unlike earlier gardens which focused on a particular demographic or cause, the garden campaigns during WWI sought out widespread public support and involvement (Lawson, 2005). In addition, changes occurred at the structural level as national groups became more invested in the success of the gardens.

The purpose of community gardens during this period, which began with WWI and lasted through WWII, was to provide a wide scale means of assistance during times of crisis. The quickest and easiest way to do this was through a hierarchical structure where the government and national organizations disseminated technical information and resources for the gardens while the implementation and organization of the programs fell to local volunteer organizations (Lawson, 2005). The temporary nature of the gardens meant that once the crisis was resolved the parties involved began to focus their efforts elsewhere (Lawson, 2005). In addition, the hierarchical organization did not foster local leadership which prevented the gardens from being established as a sustainable community resource (Lawson, 2005). Despite this, people were beginning to view gardening as a worthwhile activity that should be incorporated into their daily lives (Von Hassell, 2002).

Communal gardening programs after World War II were few and far between, however gardening did remain a favorite recreational activity for many Americans (Lawson, 2005). Post World War II government policies encouraged Americans to flee urban centers for the expanding suburban areas where they had ample space to start their own backyard gardens. This shift, however, left many cities in disrepair and alienated the low income and minority communities left behind (Hynes & Howe, 2004). What these people were left with was an increasingly vacant urban landscape that encouraged crime and vandalism (Hynes & Howe, 2004). It was not until the 1970s that people began to take matters into their own hands. Tired of waiting for the government to assist them, people began to take part in grassroots activism activities to rebuild their own communities (Lawson, 2005).

In the 1970s, people began using community gardens as an "expression of grassroots activism" (Lawson, 2005, p. 206) and as a way to reclaim their neighborhoods (Lawson, 2005). The benefits of community gardening popularized in previous eras, such as beautification and increased health and food supplies, were still the impetus behind the creation of the gardens (Lawson, 2005). However, the focus of the gardens started to shift towards the positive impact they had on both the gardeners directly involved and the larger community in which the gardens were located (Lawson, 2005). People found that the gardens strengthened social ties which in turn helped to inspire action toward "physical and social reclamation" (Lawson, 2005, p. 206). This was partly due to a change in the organizational structure of the gardens that allowed for more community ownership of the garden projects. The gardens still relied on financial and technical support from outside agencies. However, the planning and development of the gardens were increasingly done by citizens of the community (Lawson, 2005). The shift in focus to local, user involvement in the design and management of the gardens is a lasting legacy of this time period and one that remains at the core of today's community gardens.

It was the grassroots community involvement that helped the gardens succeed through the 1990s while federal funding and support diminished (Von Hassell, 2002). Unlike in the past when the gardens died along with government interest, this time many community gardens continued to thrive because of the active involvement of the participants in all aspects of the development and organization of the gardens (Von Hassell, 2002). In addition, the number of gardens increased as the range of individuals and organizations interested in embracing community gardens expanded to include those dealing with "community development, social justice, education and environmentalism" (Lawson, 2005, p. 238). Today, community gardens have also garnered mainstream popularity as people have increasingly become concerned about community food security and the importance of eating locally. These new interests lend a slightly different meaning to the community gardens of today which are part of a movement to rebuild "a spirit of local community tied to a place and restoring nature and food growing in the inner city" (Hynes & Howe, 2004, p. 172).

Despite their increased popularity, community gardens also face a number of obstacles. During the 1990s the American Community Gardening Association conducted two surveys in order to better understand the community garden movement. The surveys revealed that the two factors that most threatened the long-term

viability of the gardens were sustained interest and loss of land (ACGA, 1996). The issue of land tenure has garnered a lot of attention as there have been several high profile cases of gardens being bulldozed, particularly in New York City. The historical role of the garden as an interim land use has been difficult to overcome. Although it does continue to be a problem, there are increasing efforts being made to address the issue through the use of ordinances, land use plans and various ownership arrangements that offer more security. Even when the land is secured, maintaining the gardens long-term requires a level of commitment that many gardeners may not have initially realized. Sustaining that interest requires strong leadership, organization and a willingness to put in the time it takes to maintain the garden.

5 Methods

The research involved two methods: a literature review and interviews with community garden leaders. The literature provided information about America's largest and most successful community garden programs such as those in New York, Philadelphia and Seattle. However, it lacks information on community gardens in smaller cities and towns with less institutional support and organization, and the information tends to give an incomplete picture of the struggles that gardens have faced.

Interviews were conducted with organizers of community garden programs to get a breadth of information on multiple gardens. Participants were chosen to reflect a range of community sizes, structural organization and geographic location. Participants representing a range of city sizes and programs with varied organizational structures were chosen in order understand the full extent of issues that a community garden can come against. Geographic location was an important factor as gardens in the northeast, for example, might have different issues than gardens in the southwest because of differences in growing season, culture and political support. In addition, programs with a website were selected because of the availability of sufficient background information.

Based on the above criteria, six program coordinators were contacted, of which four agreed to be interviewed. Table 1 gives information about who participated and their affiliate organization. All participants were sent an initial email inquiring about their availability for an interview. The interviews were then conducted over the phone and each participant was asked the same questions shown in appendix A. The responses were typed, as the answers were being given, into a separate word document for each participant.

6 What Makes a Garden Successful?

Developing a successful community garden takes a tremendous amount of time and effort (Lawson, 2005). Aside from providing food, a community garden can serve as an important community building tool (Payne & Fryman, 2001). Creating a community garden that has a beneficial effect on a community, however, requires more than simply building a garden. The benefits that are associated with community gardens and that can lead to community building are more likely to develop over time through the process of building and maintaining the garden (Herbach, 1998). One of the best examples of this occurred in New York City in 1976 when the city decided that it wanted to encourage community gardens as an interim use for vacant land (Schmelzkopf, 1995). Instead of involving the intended gardeners in the planning and design process; the city decided to build the gardens and expected the community to maintain them (Schmelzkopf, 1995). The result was that the gardens were abandoned and vandalized soon after they were built because none of the residents felt responsible or had any ownership for the gardens (Schmelzkopf, 1995). In order to determine a process for starting a successful community garden, it is first necessary to look at what defines success in a community garden.

The most obvious indicator of success is how long the garden has been in operation. A long running community garden is considered successful because of its longevity and because it has been able to maintain long-lasting community interest. Lack of interest is the number one reason why community gardens fail according to a 1996 survey done by the American Community Gardening Association. The second and third most common reasons both had to do with losing land, either to a public agency or a private owner (ACGA,

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Table 1. Interview information.

Contact	Date Contacted	Personal Information	Organization	Location	City Population	Program Structure
Joe Mathers	10.Oct.07	Community garden developer for 18 years.	Community Action Coalition (CAC)	Madison, Wisconsin	214,098[a]	CAC is a non-profit community action agency. The community garden program is one of many run by the CAC. The program provides leadership training, technical advice and support services for the 31 gardens in Madison.
Jim Flint	11.Oct.07	Executive director of FBG for 7 years. Worked for 8 years as the director of the National Gardening Association's Youth Garden Grants program.	Friends of Burlington Gardens (FBG)	Burlington, Vermont	38,889[b]	Grassroots nonprofit dedicated to assisting community gardens throughout Vermont. The current organization was incorporated in 2001 but it stems from a non-profit initially started in 1972.
Lucy Bradley	02.Nov.07	NCSU Urban Horticulture Extension Specialist. Spent 11 years as the Urban Horticulture Extension Agent in Maricopa County, Arizona where she worked extensively with community gardens.	NCSU Extension	Raleigh, North Carolina	N/A[c]	The program is run through the extension horticulture department. It functions to assist interested communities and organizations with finding the tools and resources necessary to start and maintain a community garden.
Leslie Pohl-Kosbau	26.Sep.07	Has spent 33 years working as the first and only manager of Portland's Community Garden Program.	Portland Parks and Recreation: Community Gardens Office	Portland, Oregon	539,950[a]	The community garden program is run through the City of Portland Parks and Recreation Department. It has been in existence since 1975 and operates 30 gardens.

[a]US Census. (2006). Retrieved January 17, 2008, from http://factfinder.census.gov.
[b]US Census. (2000). Retrieved January 17, 2008, from http://factfinder.census.gov.
[c]NCSU Extension works throughout the state of North Carolina wherever their services are requested.

1996). In fact, the survey found that only 5.3% of the gardens surveyed were under a permanent land situation (ACGA, 1996). A garden that has been in existence for a long period of time has most likely navigated around these potential pitfalls. Therefore, addressing land tenure and maintaining interest are key steps towards creating a successful garden.

Longevity is not always an accurate measure of success because there are also many newer gardens that can be considered successful. Those gardens can be deemed a success if they have provided a benefit to the community. Below is an expanded list of the more common benefits discussed in section three:

♦ Encourage community development
♦ Increase community food security
♦ Encourage community organizing
♦ Increase neighborhood pride
♦ Increase involvement in neighborhood issues
♦ Bring opportunities for youth education
♦ Offer a place to work, play and learn
♦ Increase nutrition among gardeners
♦ Increase physical activity among gardeners
♦ Reduce crime and vandalism in the neighborhood
♦ Provide a place where intergenerational and cross cultural connections to be made
♦ Provide alternative recreation opportunities
♦ Beautify the neighborhood
♦ Encourage positive connections with the Earth

Many benefits such as beautification, alternative recreation, a place to work, play and learn, reduced crime and vandalism, community food security, increased nutrition, positive connections with the Earth, and increased physical activity occur with the operation of the garden. However, some benefits are more complicated and require more effort and organization to achieve. These include youth education, community organizing, community development and intergenerational and cross cultural connections. Among these, the most overarching is community development which, "requires and helps to build community capacity to address issues and to take advantage of opportunities, to find common ground and to balance competing interests. It does not just happen – it requires both a conscious and a conscientious effort to do something (or many things) to improve the community" (Frank & Smith, 1999, p. 6). Achieving a community garden that also helps with community development requires stability among the people involved and the land being used in the project (Schukoske, 2000). A community garden that effectively acts as a community development tool along with having secured land tenure and a sustained interest is one that will thrive. In addition, each of these factors can be expressed and enhanced through the design of the garden. Addressing these four issues at the start of the development of a community garden is feasible and will help ensure its success in the long-term.

6.1 Land Tenure

Community gardens have a unique history in that they have consistently been used as an interim land use. Unfortunately, this role does not readily lend itself to stable land tenure arrangements. Development pressures are strong for valuable urban land where the gardens have to compete with more profitable land uses. As Herbach (1998) notes, "very few gardens are owned by the community groups that run them. Still fewer are held in trust or are owned by cities that plan on keeping them gardens in perpetuity" (Securing Tenure section, para. 1). If a community garden group does not own their land outright then the future of their garden depends on the support of the city or landowner. For the garden to have a future among the conflicting demands of development then securing land must be made a priority. Furthermore, community gardeners enjoy going to the same garden year after year and lack commitment to community garden projects on land scheduled for future development (Herbach, 1998). This indicates that establishing a permanent or long-term land arrangement from the onset could help sustain user interest and dedication to the garden. Having control of the property will not address all of the concerns a community garden might face, but it does allow for the gardeners to develop

their site in ways that would not have been possible otherwise (Naimark, 1982). Every community is different as is every community garden site. For this reason, community gardeners need to determine what makes the most sense for them based on their circumstances, resources and site. The common options for land tenure arrangements include leases, land trusts, and partnering opportunities. In addition, many communities have been successful at using policy and planning tools to address land tenure issues.

6.1.a Leases

The majority of community gardens operate on leased land (MacNair, 2002). A lease is a contract with a landowner that permits the use of their land for a pre-specified amount of money and period of time. Although common, a lease does leave a community garden vulnerable since many of the leases can be terminable on short notice (Schukoske, 2000). Gardens can lease land from any willing partner, but commonly interested groups include universities, schools, municipalities, churches, apartment complexes, or health care facilities.

The length of a lease for a community garden greatly depends on the lessor. Short-term leases of one or two years are common when leasing government-owned land (Herbach, 1998). Many cities are hesitant to commit to a long-term lease because they would rather see the land developed to expand their tax base (Naimark, 1982). A short-term lease could be a good option for groups that are looking to newly establish community gardens within their city. If a land-owner or the city has never had experience with community gardens then they might be hesitant to commit their land for a long period of time. The success of the garden on a short-term lease would hopefully persuade the landowner and the wider community to make a more lasting commitment to community gardens. The Friends of Burlington Gardens have recently used this idea to help get a neighborhood garden established. The garden they worked with took three years to "get a critical mass to develop" (J. Flint, personal communication, October 11, 2007). Once they reached that point, The Friends of Burlington Gardens helped the group find a willing landowner and negotiate a lease. The lease they agreed to was a "one year lease with a nonprofit and if the group fulfills their obligations and it seems like its going well then they will be able to stay in that spot" (J. Flint, personal communication, October 11, 2007). Another situation in which a short-term lease would possibly work is in a community in which there is an abundance of vacant land. High quantities of unused land reduces development pressures on community garden sites (Herbach, 1998).

Leasing land from the government is worth further discussion since many community gardens have had negative experiences under this agreement. As mentioned earlier, the government can be an uncertain partner when entering into a lease agreement. Many cities have other priorities for their land and if a community garden site does become slotted for development, the gardeners have "little recourse when the city supports the site's development" (Herbach, 1998, Leased Government Land section, para. 2). Perhaps the most high profile case that exemplifies this issue occurred in New York City. At one point 300 of the 750 gardens in the city were threatened between the years 1984 and 2001 (Von Hassell, 2002). Ninety-one of those gardens were destroyed (Von Hassell, 2002). The gardens were leased by GreenThumb which is an organization run under the City Department of Parks; this meant that the city owned the land the gardens were on (Von Hassell, 2002), and as such, the city considered the lots to be vacant and the gardens became vulnerable when the city starting slating the "vacant" lots for development (Von Hassell, 2002). The city's view in the matter is best summarize by Fran Reiter, the Deputy Mayor for Economic Development and Planning who once said "The bottom line is, we're going to build wherever we can, whenever we can. Do we sacrifice gardens to build housing? You're damn right we do" (Raver, 1997 as quoted in Von Hassell, 2002, p. 51). Clearly, the city had their own agenda in which the gardens had no place. Luckily, in 1999, people who heard about what was happening raised funds to acquire 112 of the gardens that were slated for auction (Von Hassell, 2002). The gardens were placed in permanent land trust by the Trust for Public Land and the New York Restoration Project (Von Hassell, 2002). The experience of the New York City community gardens is common on a lesser scale in many cities. Many gardens have had greater success when they partner with the city as discussed in section 6.1.c.

The most secure option for leasing is a long-term lease. According to Lucy Bradley, a lease of five years is the minimum time commitment needed to make starting the garden worthwhile (personal communication,

November 2, 2007). Other sources indicate that a ten year lease agreement is ideal because of the time and effort people put into the garden (MacNair, 2002). In either instance, when entering into a long-term lease it is ideal to partner with an organization that has long-term stability, such as an established nonprofit or land trust (MacNair, 2002).

6.1.b Land Trusts

A land trust is a "nonprofit organization that, as all or part of its mission, actively works to conserve land by undertaking or assisting in land or conservation easement acquisition, or by its stewardship of such land or easements" (Land Trust Alliance, n.d., What is a Land Trust section, para. 1). The land is obtained through purchase, donation, bequest or through the donation or purchase of conservation easements (Land Trust Alliance, n.d.). The type of land that a trust aims to protect depends on the focus and goals of the trust, but can be closely aligned with the objectives of a community garden (MacNair, 2002). Trusts can either manage gardens directly or lease the space to a garden organization (Herbach, 1998). Unlike a typical lease situation, working with a land trust affords greater security as the land is either permanently protected as open space or specifically for use as a community garden (MacNair, 2002). Using land trusts as a way to secure community garden sites is a somewhat new idea, but has been successful in cities such as Philadelphia, PA and Madison, WI.

Philadelphia has had great success with using land trusts to protect their community gardens. The Neighborhood Gardens Association/A Philadelphia Land Trust (NGA) was formed in 1986 with the sole mission of protecting and conserving existing community gardens and other open spaces in Philadelphia (Neighborhood Gardens Association (NGA), n.d.). The land trust was developed after established gardens operating on city or privately owned parcels starting losing their land to development (NGA, n.d.). Today the NGA owns the title to twenty-nine community garden sites, which is just a small portion of the community gardens in Philadelphia (NGA, 2007). The NGA handles the insurance and taxes for the site and the gardeners are responsible for the maintenance of the gardens (NGA, n.d.). Acquiring title to both public and private land can be a time consuming and complex process that can take up to two years to accomplish (NGA, 2007). Good working partnerships are key to the success of the land trust. The City of Philadelphia has been one of the most important partners for the NGA as they are the primary land provider (NGA, 2007). In addition, the NGA works closely with the Pennsylvania Horticultural Society's Philadelphia Green program where many of the gardens now under land trust began (NGA, 2007).

The land trust arrangement has also proven successful for protecting one of Madison, Wisconsin's largest community gardens. In 1996 a 15 acre piece of state owned property, which was later increased to 31 acres, was added to the state's surplus list with the intention that it would be bought by a residential developer (Campbell & Salus, 2003). For the 15 years prior to that, however, citizens in the Northside neighborhood of Madison had been gardening on a portion of the land and using the rest for passive recreation (Campbell & Salus, 2003). When the residents heard they might lose this resource they formed the Northside Planning Council (Campbell & Salus, 2003). The Council partnered with several nonprofits including the Community Action Coalition, and successfully created an alternative development plan that was approved by the City of Madison (Campbell & Salus, 2003). The City initially agreed to a 16 year lease and later agreed to extend it to 50 years (Campbell & Salus, 2003). The lease was through the Madison Area Community Land Trust (MACLT) and the Urban Open Space Foundation (UOSF). The MACLT's mission is to acquire land for the benefit of the Madison community and particularly to provide permanent affordable housing (Campbell & Salus, 2003). The UOSF, on the other hand, is a conservation land trust focused on conserving open space resources throughout Madison (Campbell & Salus, 2003). As part of the extended lease there was a provision that the MACLT could acquire the land with a conservation easement held by the UOSF (Campbell & Salus, 2003). In 2001, adequate funds were acquired for the MACLT to acquire the land. Today, the MACLT owns the land and manages the affordable housing portion of the development (Campbell & Salus, 2003). The Friends of Troy Gardens, the nonprofit group that manages the community gardens and agriculture portion of the site, leases the agricultural land from the MACLT (Campbell & Salus, 2003). The UOSF has been granted a

permanent conservation easement for the open space component of the development (Campbell & Salus, 2003). This complicated arrangement was only possible because of the cooperation between the various organizations involved in the Troy Gardens development. Today, the site is a model in sustainable living and exemplifies what can be done through land trusts and partnerships.

Utilizing land trusts for protecting community gardens can be a very successful endeavor as illustrated by the above examples. The two examples above involved three different types of land trusts: in Philadelphia, the NGA is dedicated to community gardens; in Madison the MACLT is concerned with community resources and the UOSF focuses on open space conservation. Despite their different areas of concern, all three found a common interest in community gardens which speaks to the wind range of appeal of community gardens. Also demonstrated by the Philadelphia and Madison examples is that getting a community garden into a land trust is a complex process that requires good partnerships with the city government and other area organizations. The city was a key component to the success of the land trusts in both cities. In Philadelphia, the city provides the land trust with land, and in Madison, the city was willing to approve an alternative development plan. In addition, the land trusts relied on expertise and assistance from other community organizations. Placing a community garden with a land trust requires great commitment on the part of both parties. In both cases getting the garden into a land trust was a timely process that required a responsible and committed group of gardeners (ACGA, 1998). Because of its permanence and time commitment, a land trust is not worth pursuing unless it is evident that the need, demand and commitment to community gardens exists.

6.1.c Government Partners

The government has proven to be a less than stable partner when it comes to leasing land, however, many cities have supported community gardens through other successful partnerships. In cities where community gardens are embraced, they have the potential to be incorporated into the open space network just as any other recreation use (MacNair 2002). The city must understand the benefits of community gardens for this to successfully happen (Gardens City Handbook, 2002). In most arrangements the city helps find land for gardens, provides staff, development, organization and maintenance skills. Community gardens are an obvious extension of many government programs and could easily be merged into existing programs (MacNair, 2002). One common ally is the parks and recreation department. Community gardens that are integrated into the parks department are more easily protected from future development since they could be located on protected open space land (MacNair, 2002). No matter what the department, some feel that there is more equitable access to community gardens on public land (L. Pohl-Kosbau, personal communication, September 26, 2007).

Portland is a great example of a city embracing community gardens. Portland oversees thirty one community gardens through the City of Portland Parks and Recreation Department. Most of the gardens are on land owned by the Parks and Recreation Department, but a portion of the gardens are on private land owned by churches and colleges and some of the gardens are on public school land (Hess, 2005). The program started in 1975 when a neighborhood group approached the city about starting a community garden program (L. Pohl-Kosbau, personal communication, September 26, 2007). The focus of the program is on providing residents with equitable access to community gardens throughout Portland (Hess, 2005). The city will help communities locate and start a garden only if they see there is a need for one - typically through a substantial group of people that exhibit an interest in having a garden (L. Pohl-Kosbau, personal communication, September 26, 2007). The city helps with organization, technical assistance and education but the day to day management typically falls to the gardeners (L. Pohl-Kosbau, personal communication, September 26, 2007), though, the city is willing to work with the gardeners and do whatever they can to help the gardens run smoothly (L. Pohl-Kosbau, personal communication, September 26, 2007). One aspect of the program is educating the public to make sure that the gardens are an accepted aspect of the city's infrastructure and culture (L. Pohl-Kosbau, personal communication, September 26, 2007). The benefit of having a municipally run community garden program is that the gardens are accessible to everyone, unlike a nonprofit that may target a specific group of people (Hess, 2005). In addition, city owned sites are not on the speculative market so are somewhat protected from development pressures (Herbach, 1998). For land that the city does not own, land tenure can still become

an issue. In cities where the parks are respected as an important aspect of the culture, it is more likely that developers will seek alternatives.

Burlington, Vermont has had similar success with running a community garden program through their Parks and Recreation Department. The city provides technical and administrative support for nine community gardens through their program (Department of Parks and Recreation, Burlington, VT, n.d.). Each garden has its own volunteer coordinator that deals with the day to day activity and management of the garden (Department of Parks and Recreation, Burlington, VT, n.d.). Currently, the city is not actively expanding their program because of a lack of available land (J. Flint, personal communication, October 11, 2007). Instead, the Friends of Burlington Gardens, the city's nonprofit partner, is working with neighborhood groups to create smaller scale neighborhood gardens that are managed independently from the city (J. Flint, personal communication, October 11, 2007). The Friends of Burlington Gardens has also worked with smaller towns throughout Vermont and encourages them to partner with their cities and towns when possible as he considers public land a more secure option than private land (J. Flint, personal communication, October 11, 2007). In some cases towns actually approach Jim Flint, the executive director of The Friends of Burlington Gardens, to help them create community gardens in their community. This was the case in 2007 when the Town of Pownal sought Jim's help in creating a garden on their town green (J. Flint, personal communication, October 11, 2007). The garden was up and running for the 2007 growing season and was well accepted by the town.

Municipal agencies can be good partners for community gardens as shown by the examples of Portland and Burlington. The approach that these cities have to community gardens is different from earlier in history where the city made all the decisions. In these cases the city is there to provide support services, but the gardens are managed and decisions are made by the gardeners. This allows the gardeners to have more ownership over the gardens. The key reason why the programs in Portland and Burlington have succeeded is that the cities support and embrace the idea of community gardens. However, the gardens depend on the commitment and continued support of the city and town officials for their future success.

6.1.d Other Partners

Churches, schools, healthcare facilities, nonprofits, and housing developments can all be champions of community gardens. One of the primary ways they support community gardens is by allowing a garden on their land. Most of the organizations that are interested in community gardens see them as an asset that can benefit their users. Although leasing land from one of these organizations is feasible and can provide a steady land arrangement, it seems that it is more common for the partner organization to actually run the community garden. In the case of the latter instance, the garden would be run in a similar way to those organized through government departments as mentioned above.

A good example of this type of arrangement is the Covenant Community Garden in Fuquay-Varina, North Carolina. The garden is located on the grounds of the United Methodist church and was established in 2006. Chris Burtner is the creator and coordinator of the garden. Even though the church owns the land and runs the program, the garden is open to anyone interested and willing to commit their time and a small fee (Covenant Community Garden, n.d.). Establishing the garden on the church grounds was an idea that Chris had to sell to the congregation, but now that it is established people have enjoyed the garden even if they are not directly involved with it (C. Burtner, personal communication, November 3, 2007). In this situation, the future of the garden depends more on the continued interest of community members rather than the stability of the land. Unlike Covenant Community Garden, some gardens associated with organizations are more selective in their membership. There are many gardens on university grounds, in apartment complexes or on school grounds that are meant solely for the people associated with those organizations (Department of Parks and Recreation, Burlington, VT, n.d.). In those situations the only way to get a garden started on their land is to be a member of that community.

6.1.e Policy and Planning

Although policy is not used to immediately obtain land for community gardens, it is an important aspect

of establishing community gardens as a more permanent land use within a community. Many of the above examples have shown that local government support for community gardens can be crucial to their ultimate survival. If a city does support community gardens then they can help by making changes to their policies and zoning regulations.

Seattle is perhaps the most widely used example for these methods. In 1992, Seattle decided to incorporate community gardens into their comprehensive plan (Schukoske, 2000). In one particular section of the city, the plan specifically calls for "one dedicated community garden for each 2,500 households in the village" (City of Seattle, 1994, p. 8.82). In support of this goal the city also decided to update its ordinances to include community gardens as one of the tools and strategies for the city's open space system (Schukoske, 2000). These changes in Seattle are just one example of a trend that finds community gardens increasingly incorporated into the open space planning process. This type of support, which establishes community gardens as a legitimate and permanent land use, will ultimately help secure the gardens' future.

6.1.f Conclusion

The most important lesson from the examples given is that there is no "cookie cutter" solution to the land tenure problem associated with community gardens. In addition, many groups employ a variety of different approaches each chosen on a case-by-case basis. Obtaining land for the community garden is an important step towards creating a successful garden. As stated earlier, people are more committed to a garden where they know their hard work will pay off into the future. What is most important is that an arrangement is made that is beneficial for all parties involved.

6.2 Sustained Interest

While securing land is crucial to protecting the future of community gardens, they would not exist without the interest and support of gardeners and their surrounding community. The 1996 American Community Gardening Association Survey found that the most common reason why gardens failed was from a lack of interest. Although interest in gardening can not be forced upon people, there are several factors that can be considered at the beginning of a community garden project to help maximize the initial and sustained community interest in the project. Three important aspects of the development of a community garden that should be emphasized are the location of the garden, community outreach, leadership opportunities and funding.

6.2.a Location

A community garden's location can have a substantial impact on how engaged people are in the project. At a basic level, the geographic location of the site can make it much easier for gardeners to participate. The garden should be in close proximity to the intended gardeners: it should be no more than a short walk or bike ride away (MacNair, 2002). It is also important to take into account the demographics of a community when siting a community garden. Although community gardens have proven successful in a diverse group of communities, the chances of sustaining interest are greater if the garden also affords an unmet need. Discussed below are some demographics where community gardens have succeeded by fulfilling a need.

There are many communities of people that do not have land on which to garden. Locating a community garden in their vicinity provides them with this opportunity (Surls, Braswell, Harris & Savio, 2001). Herbach found this to be true in his research and adds that neighborhoods that have a high density or large percentage of renters and condominium owners are likely to have a "critical mass of people looking for a place to garden" (Herbach, 1998, Percentage Renters or Condo-Owners section, para. 1). Senior citizens can also be a target demographic as they might not have land or the tools to garden on their own. In addition, the garden provides a place for seniors to be active (Herbach, 1998).

Low income communities can also greatly benefit from community gardens as the produce helps to supplement food bills (Herbach, 1998). In Burlington, over 50% of the community gardeners are considered low income (J. Flint, personal communications, October 11, 2007). In addition, Jim Flint (personal communications, October 11, 2007) noted that the community gardens are actually more diverse than the

communities they are in. The gardens have a higher percentage of immigrants than the population as a whole (J. Flint, personal communications, October 11, 2007). One of the reasons for this is that there are organizations, such as the Visiting Nurses Association, that have specific community garden programs targeted at immigrant communities (J. Flint, personal communications, October 11, 2007). In the case of the Visiting Nurses Association, they provide immigrants with transportation out to one of the larger gardens in Burlington (J. Flint, personal communications, October 11, 2007).

Targeting populations can prove beneficial to the long-term viability of a garden, yet there still needs to be an overall diversity of people in order to have a sustained interest in the garden. The CAC in Madison has seen community gardens fizzle in some low income and rental communities. Joe Mathers from the CAC says that in some cases these communities are more transient with people unwilling to invest in a garden if they do not plan to stay in the neighborhood for the long term (personal communication, October 10, 2007). Many of the people living in these communities will move on in their lives. For example, young married couples will eventually move out of their rented apartment and buy a house, likely in a different neighborhood (J. Mathers, personal communication, October 10, 2007). In other cases Mathers (personal communication, October 10, 2007) has seen the ethnic mix of nearby housing complexes change with the new group being less interested in participating in a community garden. The lesson from Madison is to make sure that when targeting a particular demographic either the residents need to be fairly stable and able to commit to a garden, or the organization needs to reach out to a more diverse population to ensure continuation of the project even if there is a major turnover in the neighborhood.

6.2.b Outreach

Reaching out to gardeners and non-gardeners within the neighborhood where a community garden is located is essential to the long-term success of the project. Getting the entire community to support and embrace the garden will help it through difficult times (MacNair, 2002). Outreach is a continuing process that should be considered throughout the life of the garden; however, it is critical to begin at the initial stages of the garden's development. Outreach programs should concentrate on getting broad-based community support for the individual garden as well as for community gardens in general.

When starting a garden, the first step is to reach out to the community surrounding the community garden. The entire community should be invited to the initial planning meetings for the garden. This ensures that the project will embrace the ideas and hopes of a wide spectrum of community members which ultimately helps to secure the long-term success of the garden (Payne & Fryman, 2001). Much of this process will involve educating the community about the benefits of community gardens and how they can share in those benefits. The community gardens in the Loisaida neighborhood of New York City, for example, find that many of the people that frequently visit the gardens are not actually involved in the upkeep of the gardens (Schmelzkopf, 1995). In addition, this helps widen the pool of potential gardeners and "the greater the number of individuals who commit to the garden from the beginning, the larger the community impact when the garden reaches its goals" (Payne & Fryman, 2001, p. 6). If there is little interest at this early stage then it is perhaps best to look for another site as community support is essential to the long-term success of the garden (Emerson, n.d.).

The initial interest in a community garden program will help get the garden up and running. However, garden organizers should be prepared to continue outreach throughout the life of the garden. One of the major ways that community gardens can continue to reach out and sustain support from their neighborhood is by hosting all inclusive events such as festivals and parties (Emerson, n.d.). Another way the garden can benefit the community and sustain interest is by offering interactive learning opportunities such as gardening technique or cooking classes (Emerson, n.d.; Twiss, Dickinson, Duma, Kleinman, Paulsen, & Rilveria, 2003).

Community garden organizers, such as Jim Flint and Joe Mathers, find that one of their major roles is as outreach coordinators. In Madison, when Mathers (personal communication, October 10, 2007) has a situation where the interest in a community garden is dwindling, he will try to restructure the garden to focus on a different demographic, such as youth groups, and then see if there is enough interest to continue with the garden. In Vermont, Flint (personal communication, October 11,2007) actively advertises his services so

communities know that he is available to help them start a garden. In addition, he helps create a community among gardeners throughout the state by distributing a newsletter throughout the year and organizing events where gardeners are able to share information (J. Flint, personal communication, October 11, 2007). These actions can help build a larger community of gardeners that can support one another.

At the Covenant Garden in Fuquay-Varina, Chris Burtner is also working at expanding the reach of the community garden. She has had trouble getting volunteers to help with the garden and is trying to widen the support base by establishing an advisory council that would include other neighborhood organizations such as the food pantry as well as citizens that would share an interest such as local farmers (C. Burtner, personal communication, November 3, 2007). SEEDS in Durham, North Carolina used a similar method to get broad based local support. When the program was first established they formed a board that included the mayor, a lawyer, landscape architect, businessman, farmer and chef (B. Brodie, personal communication, November 3, 2007). Working at the community level helps raise awareness of the benefits of community gardens which helps establish them as a valid and valuable land use.

If a community garden is going to succeed in the long-term it must function in a way that sustains the interest of the gardeners as well as the larger community. Accomplishing this requires reaching out to a diverse group of potential gardeners and garden supporters, which takes planning and a conscious effort. Developing an outreach program when a community garden project is initiated is a good way to gauge support for the project, develop relationships that can help ensure continued support and guarantee that the design includes event and education spaces that can be used for the program.

6.2.c Leadership

Many community gardens have survived for a long period of time because of the commitment and dedication of their leaders. Leadership factors into the success of a community garden in two ways: it is vital to have an initial leader who can spark the idea and have the motivation to carry it forward; and community gardens should be organized in a manner that increases their capacity for leadership development.

The initial motivation for starting a community garden should ideally come from within the community, as it helps ensure that the ideas and goals of the project are coming from area residents rather than an outside organization (Mattessich, Monsey, & Roy, 1997). In their research, Mattessich, Monsey, and Roy (1997) found that successful community building efforts tended to occur "in communities containing at least some residents who most community members will follow and listen to, who can motivate and act as spokespersons, and who can assume leadership roles in a community-building initiative" (Mattessich, Monsey, & Roy, 1997, 25). In many cases this is a small group or single individual. Brenda Brodie (personal communication, November 3, 2007) with SEEDS in Durham, North Carolina has found that "you need that passionate person, without them the programs fizzle." At the Fuquay-Varina United Methodist Church Chris Burtner is an example of a passionate leader: without her motivation and leadership, the Covenant Community Garden would not exist. Because of the benefit of having a strong community leader, many community gardening organizations do not seek out gardening sites, but rather wait for potential gardeners to seek out their services. This has been the case in the City of Portland community garden program. They assist neighborhoods that have exhibited a need and significant interest in the garden as indicated by the number of people interested (L. Pohl-Kosbau, personal communication, September 26, 2007).

Once established, it is crucial that leadership roles get dispersed. Providing opportunities for participants to succeed at small manageable tasks helps empower them and encourages them to assume greater responsibility (Payne & Fryman, 2001). In addition, allowing participants to share in leadership tasks makes it easier to replace leaders as necessary as well as to fill additional leadership roles that might appear as time passes (Mattessich, Monsey, & Roy, 1997). The initial community garden leaders or the assisting outside agency can help individuals recognize their potential role as a leader by giving them the opportunity to have their voice heard and participate in decision-making processes (Payne & Fryman, 2001). Having an inclusive decision-making process from the onset can help gardeners avoid harmful divisions and bring unity to face potentially difficult issues (MacNair, 2002). In Burlington, Jim Flint observes that there is less activism among

the gardeners in the City of Burlington gardens because their needs and organization are taken care of through the centrally coordinated program which leaves fewer opportunities for involvement in leadership roles (J. Flint, personal communication, October 11, 2007). (J. Flint, personal communication, October 11, 2007). He notes, however, that he has seen more involvement with those people starting smaller neighborhood gardens without the support of the City of Burlington because they have had to work together to coordinate and manage the garden as well as pool from their own resources to secure services and technical skills (J. Flint, personal communication October 11, 2007).

Providing mentoring and leadership training once the garden is underway can help sustain the leadership capacity of the community garden project because, as Payne and Fryman (2001) note, "new learning experiences increase people's interest, investment, and ownership in the project" (p. 17). This has been the case in Madison, Wisconsin where Joe Mathers (personal communication October 10, 2007) found that the long-term stability of a community garden is more secure when the leadership activities are dispersed among the gardeners. He has worked on fostering those leadership skills by providing leadership training primarily focused on the first three years of a garden (J. Mathers, personal communication, October 10, 2007). The training has been used to foster smaller leadership opportunities that he encourages people to hold for two years before training someone else for the role so that nobody gets stuck in one position (J. Mathers, personal communication, October 10, 2007).

The examples above show the importance of having leaders involved in the development of a community garden. However, they also show that it is equally important to make sure that the leadership responsibilities eventually get dispersed. This will help sustain the garden by allowing a greater number of people to become invested in the project. Employing the tactics above will ensure that a community garden's existence is not tied to a single individual or small group of leaders, and thereby increases the garden's long-term stability and ability to withstand change.

6.2.d Funding

Even if a group is highly motivated and organized, a community garden project will not go far without appropriate financial planning. The initial start up of a community garden can be an expensive undertaking. It is important to be aware of the expenses associated with starting and running a community garden as well as how to obtain funding. Several methods for acquiring funds have proven successful in other community garden projects, including fundraising, seeking donations, securing grants and charging fees.

The price of starting a community garden will vary by location with the costs of the materials needed for the garden, the size of the garden, the land arrangement and the services provided. For example, in Madison, the CAC assists in reducing the costs of starting and maintaining community gardens by holding leases, providing free seeds, paying for water service as grants allow, assisting in the purchase and installation of water systems and fencing, insuring the gardens, providing mulch and compost at wholesale prices and tilling the gardens (CAC, n.d.a). Without these benefits the gardeners would have to find other ways of bearing these operating expenses which would ultimately increase both the initial and maintenance costs of the garden. Despite the potential variations, there are a few ball park figures that can help guide an initial budget. Surls et al. (2001) estimates that the basic building elements of a community garden, which does not include the cost of the land, service fees, insurance or plant material, runs between $2,500 and $5,000. Bradley and Baldwin's (2008) estimate was similar at between $1000 and $4000 with approximately $200 in maintenance fees once it is established. Leslie Pohl-Kosbau (personal communication, September 26, 2007) with the City of Portland, however, estimated that community gardens in Portland can cost between $25,000 and $60,000 to start. In order to disperse some of the expenses it is possible to design the garden in stages to allow time to acquire additional funds and carefully plan any additional improvements (Surls et al., 2001). Identifying funding opportunities and resources from the beginning is crucial to understanding the potential limitations of the community garden project.

Fundraising is the easiest and most accessible way for a group to get together and raise money for their garden project. A fundraiser can be anything from potluck dinners to bake sales and car washes. The most

important thing to keep in mind when organizing a fundraiser is to minimize the costs associated with hosting the fundraiser in order to maximize profit (Naimark, 1982). Fundraising can be especially useful to expand infrastructure and garden programs once the garden is established (Flint, 2005). In addition, they are also an excellent way to garner good publicity and to reach out to the community (Emerson, n.d.).

Getting materials and labor donated is also an excellent way to reduce costs. Community businesses, for example, might be willing to donate some supplies such as lumber, fencing or plants (Surls et al., 2001). Chris Burtner had a lot of success acquiring donated materials for the Covenant Garden. She found that once she explained the project, businesses were more than willing to help (C. Burtner, personal communication, November 3, 2007). This was the case with a local North Carolina company who donated soil conditioner and a church member who donates his time and tractor for the garden (C. Burtner, personal communication, November 3, 2007).

Grant money can be a crucial source of funding for community gardens. Grants are often for a specific purpose and can be available from federal, state, city or nonprofit organizations. Obtaining grant money can be a time consuming and technical process. Receiving and administering the funds requires a tax-exempt 501(c)3 status – the same status a nonprofit or church organization could have (Surls et al., 2001). Portland community gardens benefit from the The Friends of Portland Community Gardens which is the nonprofit partner to the City of Portland community garden program. The organization was established in 1985 in response to budget cuts within city departments (Friends of Portland Community Gardens, n.d.). The advantage to having the nonprofit partner is that it is easier for them to raise money (L. Pohl-Kasbau, personal communication, September 26, 2007). While a community garden can go forward and incorporate as a nonprofit, it is often easier to partner with a nonprofit organization that can receive and distribute grant money. In Madison, the CAC offers the New Garden Fund Grant to help establish new gardens in the city (Parker, 2007). The money is budgeted from the city's Community Development Block Grant office and can be used for anything the garden needs, from fencing to raised beds (Parker, 2007). There is a steady source of funding for garden improvement projects in Madison thanks to the community and state block grants (J. Mathers, personal communication, October 10, 2007). Gardeners can also apply for additional city funding through the Neighborhood Enhancement Grant Program or the People for Parks Grant Program. The Friends of Burlington Gardens offers a similar opportunity for gardeners in Vermont seeking to make improvements to their gardens through the Friends of Burlington Gardens mini-grants (J. Flint, personal communication, October 11, 2007). When seeking grant money, community gardens can look towards federal, state and city government programs as well as nonprofit organizations with like minded interests.

Charging a fee to participate in a community garden is a standard practice. The fees help cover the costs of maintaining the gardens once they are established. Table 2 shows some sample cost of community gardens per plot size. The fees vary by location, but should be determined based on the requirements for a particular garden.

Table 2. Garden Fee Information

Organization	City, State	Plot Size	Cost per year
Covenant Community Garden	Fuquay-Varina, NC	group gardened	$10.00 & time commitment of 4 hrs. per month
CAC	Madison, WI	400 sq. ft. 200 sq. ft.	need based sliding scale with costs ranging between $7.50-$50.00
City of Portland	Portland, OR	400 sq. ft. 32 sq. ft.	$45.00 $15.00 $10.00 initial deposit for either size
City of Burlington	Burlington, VT	700 sq. ft. 350 sq. ft. 120 sq. ft.	$52.00 $32.00 $18.00

Funding a community garden project often requires a bit of resourcefulness. Having the money to provide for the basic needs, improvements and additional programs that community gardener might want can go a long way towards sustaining gardener's interest in the project. None of the gardens mentioned above relied on one source of funding, but rather all used a variety of resources. Utilizing any of the funding strategies above requires organized community gardeners that are able to work together towards a common goal.

6.3 Community Development

For a community garden to be a successful community development tool it must succeed in increasing the community's capacity for meeting their economic, social and physical needs (Lawson, 2005). Payne and Fryman (2001, p. 3) identify several characteristics of community gardens that make them uniquely qualified to for this task:

♦ the gardens are places where people of all ages, races and income levels can interact in a non-threatening way

♦ community gardens are continuous projects that can be sustained by community members rather than outside agencies

♦ there are a wide range of skills necessary to maintain the garden

♦ the evolution of the garden offers unique challenges to the participants

♦ the residents control the garden space

♦ the gardens have the potential for dramatic short-term visual effects

♦ the process of gardening allows people to feel pride about doing something for their community

♦ the process of developing the garden empowers people to realize that they can contribute in a positive way to their community

Maximizing this community development potential does not necessarily happen *once* a garden is started; rather, it depends on *how* the garden is developed. Key to the process is that the motivation and driving force behind the garden must come from the community itself (Payne & Fryman, 2001). The eventual success of the garden, though, is often a combined effort between the gardeners and a pool of community resources and organizations (Schmelzkopf, 1995). There are many factors to consider when seeking to increase the community building capacity of a community garden including building relationships and organization.

6.3.a Build Relationships

Building relationships is a broad idea that is important at many levels of a community garden project. In order for the garden to meet its potential as a community development tool, there needs to be positive relationships between gardeners, within the immediate neighborhood, and within the larger community. All of these relationships combine to help increase the impact of the garden and awareness and support for the garden. This support can help a garden achieve long-term success, and thereby empower the gardeners to see their impact in their community.

One of the major ways to facilitate personal relationship between gardeners is by creating formal and informal opportunities for social interactions (Payne & Fryman, 2001). These interactions and the ability to work together encourage connections between the gardeners which help equip them with the ability to effectively tackle other issues that might be negatively affecting their neighborhood (Payne & Fryman, 2001). Some examples of these types of interactions include classes, workshops and parties. More specifically, the CAC in Madison has had success with organizing garden potlucks, educational workshops that pair experienced and non experienced gardeners, craft days, cooking and preserving classes, organic gardening classes and classes to share general gardening tips (CAC, n.d.b).

The community development potential of a community garden can affect both gardeners and non-gardeners within a neighborhood. Incorporating the neighborhood into the community garden project can go a long way towards expanding the garden's positive impact on the community (Payne & Fryman, 2001). From the outset, the entire community should be invited to join in the initial planning stages of the garden, to ensure that the garden address the needs and goals of everyone in the neighborhood (Payne & Fryman, 2001). Beyond

that, the garden can build its role as a community asset by inviting residents to join in special garden activities such as classes and parties as well as providing safe places and activities for children and families on a more regular basis (Payne & Fryman, 2001). These actions will help to share the benefits of the garden as well as integrate it into the community fabric, helping secure it in the long-term (MacNair, 2002).

Lastly, a community garden should be connected to a larger network of community groups and organizations. These relationships help provide gardeners with services but more importantly the "merging of agendas among partners supports the garden and nurtures a collective passion to make deep and lasting positive change in a community" (Payne & Fryman, 2001, p. 8). One successful method for building these relationships is by forming coalitions with other community members and organizations (Payne & Fryman, 2001). These relationships help educate the community about how the gardens can be a resource for community development.

Another method of establishing community connections is by networking opportunities which ultimately help increase confidence among gardeners (Payne & Fryman, 2001). The Friends of Burlington Gardens has done a great job of using networking to increase communication between gardeners and gain support throughout the state of Vermont. They have formed a separate coalition called the Vermont Community Garden Network which brings together gardeners, garden organizers and partner organizations for the common purpose of strengthening community gardens in Vermont by linking them together (FBG, n.d.a). They accomplish this by sharing stories, resources and information through an email bulletin, newsletters and by holding conferences throughout the state to educate people about community gardens (FBG, n.d.a).

Relationships built at any level are important for the long-term survival of a community garden as they help establish the garden as an integral part of the culture and infrastructure of a city. Fostering these relationships can help inspire confidence and build skills among gardeners, turning a simple garden project into an important community building asset (Payne & Fryman, 2001).

6.3.b Organization

The character and functioning of a community garden can be influenced by the organizational structure. Community gardens can either be run independently by the gardeners or through a separate organization. Even if a garden is independently organized and managed, they may still operate on separately owned land that is either leased or in a land trust. A more common arrangement is for the community garden to be run through an organization such as, a city department, nonprofit, church, school or housing complex. In these cases the gardens are still typically managed by the gardeners; though the umbrella organization assists with other aspects of the garden such as providing technical resources, educational opportunities, building materials, staff, and financial assistance. There are many partner organizations, such as nonprofits, whose services are available to assist the gardeners. This is the case in Vermont where the nonprofit organization the Friends of Burlington Gardens is "dedicated to the continued growth and success of community gardening across Vermont" (FBG, n.d.). In other situations the organization might be dedicated to a broader cause of which community gardens is one division. An example of this type of organization is in Madison, Wisconsin where the Community Action Coalition has a community garden program as part of its efforts to develop "the economic and social capacities of individuals, families and communities to reduce poverty in Dane, Jefferson and Waukesha counties" (Community Action Coalition of South Central Wisconsin, Inc. [CAC], n.d.). It is helpful to have a relationship with these partner organizations as they can not only assist with the overall function of a particular community garden but also help advocate for them at the community, city and state level.

Independent of their organizational structure, community gardens should also seek to enhance community building capacity by encouraging inclusiveness. Inclusive gardens allow individuals and groups to contribute their knowledge, skills, and experience which will increase their investment in the project (Twiss et al., 2003). The key to developing a garden that meets the needs and goals of a community is through its organization. Two aspects of garden organization should be addressed to help the garden achieve success in community building: the overarching organization of the garden; and the internal organization of the garden.

The most important aspect of garden organization is that it be driven by the needs and goals of the community. Outside agencies can assist in this process, but should resist imposing their priorities on the

direction of the garden (Payne & Fryman, 2001). An effective community building initiative will be organized around the goals, priorities, needs and hopes of the community (Payne & Fryman, 2001). The initial planning stages of the garden should include a diverse group of community members to allow the entire array of perspectives to be represented in the eventual creation of the community garden (Payne & Fryman, 2001). Establishing a garden that is first and foremost organized around the needs of the community will help the gardeners utilize the resources and services of partnership organizations more effectively, without allowing them to derail the purpose or focus of the garden (Mattessich, Monsey, & Roy, 1997).

The internal organization of the community garden is also an important aspect of creating a garden that functions effectively in the long-term and builds an ability to build community. The organization of a garden includes everything from defining rules for the garden, determining member rights and obligations, to deciding how best to utilize resources and planning events (Von Hassell, 2002). These decisions can be made through different garden organizational arrangements. Some gardens utilize a more formal arrangement with elected leaders while others focus on broad-based decision-making (Von Hassell, 2002). The benefits of having a more structured organization are that it can provide a framework that enables more gardeners to have a voice, and it helps "promote stability, trust and a foundation for growth" (Bradley & Baldwin, 2008, p. 7).

A community garden project should be organized in a way that builds upon the resources and ideas of the community. Once established, the internal organization of the garden should be agreed upon by the gardeners and set up in a way that allows for maximum gardener participation. Starting a garden with these organizational goals in mind will help establish a garden that can best meet the changing needs of a community which will help it function as a community development tool.

6.4 Design

There are two factors that should be kept in mind throughout the process of designing a community garden that hold true no matter what design elements the community decides are important to incorporate into the garden. First, the design process should be a collaborative effort (L. Pohl-Kosbau, personal communication, September 26, 2007). In Portland, community garden design is done with at least eight to ten stakeholders present (L. Pohl-Kosbau, personal communication, September 26, 2007).   Second, it is okay to start out small. Lucy Bradley (personal communication November 3, 2007) cautions that gardens should avoid being too big to start with and recommends, instead, that the design be altered later to accommodate growth. Starting small was also the tactic that Chris Burtner (personal communication, November 3, 2007) used when creating the Covenant Garden as she was not sure how popular the garden would be or the amount of volunteers who would be available. Even when starting off small it is a good idea to have a design for a larger vision: that way there is a plan for future additions as resources become available (Bradley & Baldwin, 2008).

In order to function successfully, a community garden must be designed to account for the factors discussed in section 6.1-6.3. In addition, there are other specific design features that were repeatedly mentioned in the literature as being important to the overall operation of the garden. The design elements fall into four general categories: site selection; access; garden spaces; and, site features. There is no single design consideration that can inspire secure land tenure, sustained interest and community; rather it is the combination of these features which can create a space that effectively responds to the needs of the community.

6.4.a Site Selection

There are many aspects of a site to consider when establishing a community garden. The garden should accommodate as many community needs as possible to make it more relevant to a greater portion of the population. When selecting a site the participants need to consider the tenure options of the location and the geographical and physical properties of the site. If chosen carefully, site selection has the ability to increase a community gardens success.

Section 6.1 highlights the land tenure arrangements commonly implemented for community gardens. Prior to agreeing to any of these options, the community gardeners must first find a site for the garden. Based on the research, community gardens have thrived in many different locations with the success depending on the

support of the organization. It is possible to use this information to guide the search for a community garden site; however, the interested organizations will vary by community. Possible site options include vacant land, housing development land, park land, municipal land, school and university grounds, churches, and land owned by nonprofits.

The geographical features of a site must be considered because a well sited community garden can help sustain community interest. As mentioned in section 6.2.a, the site should be located in close proximity to the intended gardeners. This means a short walk or bike ride away (MacNair, 2002). Another factor to consider is the demographic of the surrounding community. Gardens have been successful in communities comprised of a large number of renters or condominium owners, senior citizens, low income families and ethnic enclaves. However, it is also important to avoid homogenous communities as diversity can help sustain a garden in the long-term.

Once a potential site is found, its physical properties should be considered. There are several basic features that make a site an appropriate place for a garden. The site should receive six or more hours of sunlight a day for optimum planting conditions (Naimark, 1982). There should also be eight to nine inches of topsoil (Naimark, 1982). This may be difficult to come by given that many community gardens are in urban areas. In addition, there is a good possibility that the soil will be contaminated. It is possible to overcome these issues by importing soil and building raised bed (MacNair, 2002). It is important to identify these challenges when selecting a site because they can increase the cost of developing the site. The site also needs to have access to water. On average, a community garden should seek to have one hose bib for every four plots (Surls et al., 2001). Paying to install a water meter can be costly and therefore it is advisable to find a site that already has water or where the costs of installation are covered (MacNair, 2002).

6.4.b Accessibility

Creating an accessible garden on different levels will help broaden the appeal of the garden in the community. This will help sustain interest and provide a more welcoming place to encourage community building. There are several types of accessibility that a garden should address. The garden should seek to encourage diversity by creating a site that is accessible to all types of people including the elderly and the disabled (Payne & Fryman, 2001). This can be accomplished by following ADA requirements for path construction. If wheelchair users are anticipated, it is also possible to construct raised accessible planting beds. In addition, the garden needs to be accessible for service. Planning this in advance can ease potential logistical issues further down the road. A community garden can receive deliveries of building materials, compost, soil, and plants and as such will require truck access. The garden should have a gate, if there is a fence, to allow for this vehicular access as necessary (Naimark, 1982). In addition, when designing the garden the access point should be located in close vicinity to an appropriate delivery location so that trucks do not need to drive through the entire site.

6.4.c Garden Spaces

It is the ability to facilitate community interactions that make community gardens valuable community assets. The interactions between gardeners and within the community can be encouraged through the design of garden spaces. Experienced community gardeners and garden organizers repeatedly recommend that community gardens reach out to the community by hosting social events and educational opportunities. In order for a community garden to successfully function in this way, the design of the garden must accommodate these spaces. In addition, the design of a community garden can have a large impact on how the gardeners interact with one another.

Incorporating community gathering and socializing spaces into the design of a garden is crucial to its success. Payne and Fryman (2008) summarize the importance of these spaces nicely when they say that "common areas create a sense of place and build a community garden's identity. An inviting shared space, even something as simple as a comfortable spot to sit in the shade, gives gardeners and neighbors a place to gather informally, outside of organized meeting and social events" (p. 7). In addition there should be larger spaces to

accommodate the social events and activities as discussed in section 6.3.a.

In his experience with community gardens in Madison, Joe Mathers (personal communication, October 10, 2007) recommends that the garden site be compact, rather than long and linear, as this helps gardeners to meet and see each other, as well as making it easier to organize logistically and service with water. More open sites also increase visibility which helps to prevent vandalism and makes the gardeners feel safe (Herbach, 1998). There is no standard size for a site, but it should be sufficiently large enough to accommodate the site features that the community wants. These will be discussed below but can include, for example, the gardening plots, common areas, tool sheds and composting areas (MacNair, 2002). The number of plots should be based on the anticipated participation and their size will vary according to the needs of the gardeners. One thing to keep in mind with plot sizes it that it is typically easiest to maintain a consistent size throughout the garden (Ferris, Norman, & Sempik, 2001). Examples of plot sizes can be 10 x 20, 15 x 15, 25 x 25, and any of those can be easily halved. Pathways between the plots are recommended to be a minimum of 3 feet wide which can easily accommodate a wheelbarrow (Ferris, Norman, & Sempik, 2001).

6.4.d Site Features

There are many site features identified through research that garden organizers felt were important for creating a sense of community. Jim Flint (personal communication, October 11, 2007) says that he works with community gardens throughout Vermont to help them think strategically about those features that will create a nice visible garden that can be as asset to the community. In addition he encourages gardeners to put a lot of effort into the design of the garden so that they can create a space that will last a long time (J. Flint, personal communication, October 11, 2007). Some of the most important site features to consider including in a community garden are:

♦ communal shed
♦ sign
♦ bulletin board
♦ picnic and barbeque space
♦ space to display murals or public artwork
♦ shaded areas
♦ outdoor classroom
♦ composting area
♦ demonstration garden area
♦ attractive landscaping
♦ fence
♦ motion lights to deter vandals

7 Developing a Process

Table 3 describes a flow diagram that can be used to guide a decision making process for developing community gardens with long-term stability (See Table 3 (to be inserted as the next page)). Each section above has been condensed into easy to read guidelines and suggestions so that community garden organizers can make informed decisions about what will work best for their particular situation. Each community garden is different and, therefore, there are no recommendations that can be used by all community gardens. The process described is by no means inclusive of all the decisions that community gardeners need to make during the development of a garden, however, it does present recommendations for those issues which were identified through research to be the most crucial for sustaining a long-term community garden.

Note: I am in the process of revising the process diagram and will have that at the upcoming meeting.

8 Conclusion

Community gardens have such wide appeal and benefit that they have attracted the attention of a diverse group of public and private organizations which act as a support network for the community garden movement. People and organizations looking to start a community garden can easily find a myriad of resources and knowledgeable individuals to work with in the community. Despite this, individual community gardens often face an unsure future. The gardens are beginning to overcome their past fate as an interim land use and organizers have been looking for ways to help make the future of community gardens more secure. There will never be a single process that can accomplish this task; however, this paper has offered insight into those factors that have, in the past, been most effective at creating successful community gardens. Those factors combine to guide a process for starting community gardens that promotes long-term viability, stability and success. This will be increasingly necessary to consider as community gardens are going to become even more prolific in the future. With the rising urban population, increasing momentum in the community food security movement and the willingness of local governments to incorporate community gardens into their development agenda, community gardens are on their way to becoming a more permanent and accepted feature of the urban landscape.

Note: The paper will continue with information about my project, which is to locate and design a community garden site in Raleigh based on the above recommendations. It will include information about Raleigh's situation, identify resources Raleigh has to assist a community garden, a detailed account of how the above criteria can be used to identify a site in Raleigh and a design developed using the above recommendations.

Appendix A: Interview Questions

Is your organization involved in picking community garden sites? What criteria are used to locate the sites?

Do groups or individuals always seek out your organizations help when trying to start a garden or is the organization seeking out new neighborhoods to start gardens in?

If your organization is seeking out new neighborhoods, what criteria are used to decide what neighborhood a garden would work best in?

Has your organization found gardens to be more successful in certain types of communities? (i.e. with the elderly, certain ethnic groups, renters vs. owners, lower income areas)

If people are coming to your organization to start gardens, are they typically individuals or established neighborhood groups, or something else?

Does your organization require a certain level of group organization before they get involved?

Has your organization had gardens that it has worked with fail? Why?

Has your organization ever started work on a new garden and not followed through with it? Why?

What do you see as the main reasons why gardens have succeeded?

Have you found that there are some steps you can take when starting a garden that help them succeed in the future?

Is land tenure a major issue? What arrangements are made for land with most of the gardens (lease, own, trust)? Is it different for each site and/or neighborhood?

Are there other major issues the gardens and gardeners have to deal with, especially initially?

Are there any other neighborhood organizations, nonprofits or groups that help with the community gardens? Does your organization work with them in any way?