ESTABLISHING COMMUNITY GARDENS FOR LONG-TERM SUCCESS

A THESIS

Presented to

The Faculty of the Environmental Program

The Colorado College

In Partial Fulfillment of the Requirements for the Degree

Bachelor of Arts in Environmental Science

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May 2013

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Abstract

Urban agriculture has had a strong presence in American cities throughout history, whether from concerns of food security or desires for green spaces. In the past two decades, gardens have made a large comeback due to grassroots and community desire to build community and partake in the local food movement. Common literature has agreed on the benefits that gardens can provide for cities, but no study has found what it specifically takes to establish gardens successfully, in order for their benefits to consistently show for the long-term. This study determines what factors are necessary to establish community gardens with longevity in mind. Through extensive analysis of existing literature, this study finds that the three largest factors for establishing and maintaining community gardens are community interest, support for resources, and organized structure. This study then examines how these factors are specifically at play in Colorado Springs, as the city's budding interest in gardening makes for an exemplary case study. For Colorado Springs, this study finds that while community interest and mechanisms for resource support are present when it comes to establishing gardens, in terms of longevity, a lack of consistent structure for supporting and maintaining community gardens could hinder the longevity of community gardens. It is proposed that more organization and structure for the gardens, especially in regards to leadership development, can promote the success of these gardens, as well as other gardens nationwide, for the future by making gardens more self-sustaining.

Introduction

During the past two decades, American cities, nation-wide, have been trending a large growth of community gardens. The American Community Gardening Association estimates there are more than 20,000 community gardens today (Kelley 2011). While urban agriculture and the concept of growing food within city limits is not new, many people have recently shown interest in gardening for a wide variety of reasons, from wanting to connect back to the land to wanting to meet their neighbors. Community gardens are a logical solution to accommodate gardeners within city limits; they are urban gardens, on a shared piece of land, that are collectively maintained by a community. The typical way that a community garden functions is that each member rents a plot annually; the rental fee covers costs from the water bill and other specific resources. While each member has his/her own plot that they tend to, community gardens are still "spaces of dependence" (Smith and Kurtz 2003: 200). By collectively gardening on the same property, each member is inherently reliant on the rest of the gardeners to keep the garden maintained. The gardeners have to invest a significant amount of their

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¹While community gardens have regained recent popularity, the concept of growing food in urban environments is not new; urban agriculture has had a significant presence throughout history in American cities. Initial phases of urban gardens show that the practice of growing your own food was encouraged by federal and local governments in times of food-security fears (Crossney and Shellenberger 2012). The best example of this was during World War II, where "victory gardens" were encouraged to curb fears of food-shortages due to the war (Pothukuchi 1999). In fact, in 1943, over 20 million "victory gardens" in U.S. cities were producing 8 million tons of produce (44% of fresh vegetables in the United States).

time to maintain their plots, and this can forge both an individual and collective sense of identity within their garden (Smith and Kurtz 2003).

Despite the emerging popularity of community gardening, to date the majority of literature and research about this trend has focused primarily on the benefits that community gardens provide for cities. While some of these studies have acknowledged differences that account for garden successes as well as failures, no existing studies have investigated what it specifically takes to establish a garden for success. Garden success can take many forms, but this study, in particular, finds for successful gardens to be consistently of benefit to the community, while being self-sustaining for the long-term. This study fills this void as it aims to seek out what it specifically takes to set up a community garden for long-term success, in order for gardens to reliably live up to their beneficial expectations nation-wide. Through extensive analysis of existing literature, this study overall determines that the three largest factors for establishing and maintaining community gardens are community interest, support for resources, and organized structure. From analyzing different garden programs, and conducting a case study of community gardens in Colorado Springs, this study finds that an inconsistent organized structure can be the largest hindrance to the longevity of gardens. This study concludes that addressing the structural issues of gardens, especially by implementing improvements that focus on leadership development, can significantly increase the likelihood of community gardens sustaining themselves for the long-term.

Colorado Springs: A Case Study

This study uses the city of Colorado Springs as a case study to support its theoretical analysis in regards to establishing gardens. Colorado Springs makes for an appealing case study as its interest and growth of community gardens is still small and budding. While a few gardens have come and gone throughout El Paso County's history, only one community garden, the Bear Creek Garden, existed in Colorado Springs prior to 2007 when the city witnessed an increase in the presence of community gardens. In 2007, Larry Stebbins, an avid gardener, started Pikes Peak Urban Gardens (PPUG) after a Colorado College student, Matt Gettleman, inspired Larry to take his gardening skills from his backyard to his community (Larry Stebbins, Personal Communication). Larry found there to be a large amount of interest in gardening from the community; he believes that "people want to get back to gardening for a lot of reasons—the high food and gas prices, eating healthier, promoting locally grown, [and] having a family activity" (cited in Kelly 2011). Larry wanted to cater to this interest by starting PPUG with mission of establishing community gardens throughout Colorado Springs. PPUG has the goal of adding three new gardens to the city annually, and there are now currently a dozen gardens in Colorado Springs (Larry Stebbins, Personal Communication, September 17, 2012). While Larry has already found a large interest in gardening in Colorado Springs, many have also expressed the desire to create a larger sense of community, which creates another reason for establishing more gardens. Known for its urban sprawl, the city does not garner a large sense of collective community. Mayor Bach specifically finds an issue of young professionals leaving Colorado Springs to find a "hipper place to live" due to a consistent feeling about a lack of community (Chacon 2011: 1).

Whether people want to garden for individual reasons, or the community wants to garden for its broader benefits of creating a tighter community, Colorado Springs is experiencing a budding interest in establishing more community gardens. With the City's small sample size, the theoretical factors of community interest, resources support, and organized structure are easily distinguishable. Colorado Springs overall represents a prime case study that can be representative of other cities nation-wide. With its dry and high altitude gardening conditions as well as urban sprawl, many would agree that if community gardens can be successful in Colorado Springs, then they can be successful anywhere.

Methodology

This study examined a wide breadth of literature about community gardens to determine what it takes to successfully establish gardens for the long-term, while additionally using Colorado Springs as a case study to support the theoretical findings. First, an extensive examination of current existing literature on community gardens was compiled and analyzed to determine what factors are most at play when it comes to establishing and maintaining gardens. Most literature regarding community gardens have focused on the benefits of gardens, while providing a history of how exemplified gardens were started and maintained. The successes and failures of different gardens nation-wide were analyzed to sort out what factors contributed most to garden longevity. Many specific factors that led to garden successes as well as factors that contributed to garden failures were pieced together to determine an explicit framework that makes for garden success and longevity. By compiling different histories and studies of community gardens

throughout the past two decades, it was determined what components are most significant when it comes to successfully establishing gardens, as well as how those components relate to each other.

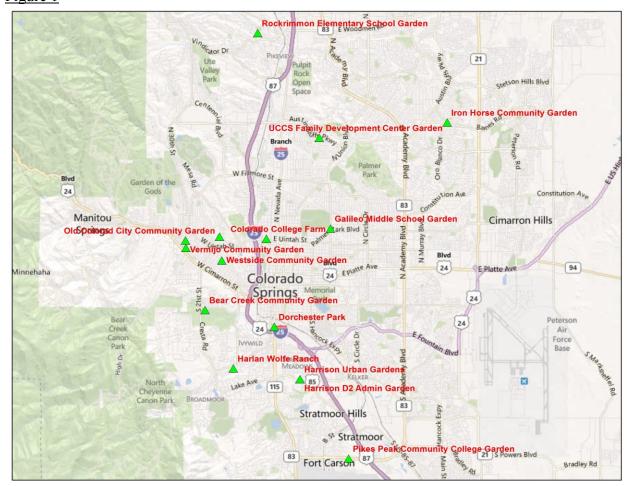
Second, the Colorado Springs case study was conducted with qualitative research methods. Upon receiving approval from the Institutional Review Board, two sets of interviews were conducted with various community members in Colorado Springs who are affiliated with community gardens. For the first set, six expert interviews were conducted with representatives from different organizations and agencies in Colorado Springs. These interviews included Larry Stebbins (Pikes Peak Urban Gardens), Richard Skorman (Parks Solution Team), Christian Lieber (Parks and Recreation), Beth Diana (Department of Housing and Urban Development/Colorado Springs Urban Renewal Authority), and Carrie McCausland (Colorado Springs Sustainability). Each "expert" was asked to discuss how their agency or program is involved with developing community gardens.

Next, twelve members of the Colorado Springs community who belong to a community garden were interviewed about their experiences with gardening. Each gardener participated on a volunteer basis and was informed about the project from Rich Young, who is the community coordinator for PPUG. Three of the gardeners additionally participated in a focus group together to discuss their experiences. The gardeners represented the Harrison Urban Garden, Westside Community Garden, and Vermijo Community Garden, and two of the gardeners formerly belonged to the Bear Creek Community Garden. One interviewee asked to participate after hearing about this study; she helped create a garden that was not affiliated with PPUG, the Ranch Community

Garden. While the sample size is relatively small, the representation of different community gardens as well as the different backgrounds of gardeners provides a wide diversity of experiences with community gardening. To maintain anonymity, all of the gardeners' names have been changed in this report. Figure 1 shows the locations of these gardens, except the Ranch Community Garden, due to limited information when the map was made. This map overall illustrates the locations of most of the current community gardens throughout Colorado Springs. While this map additionally includes school gardens and demonstration gardens, these gardens were not focused on in this study.

Gardeners were asked a wide array of questions regarding their experiences in their gardens. Some of the topics included reasons for joining the garden, inhibitors for not returning in the future, issues that have arisen in the garden, ideas for improvement for their garden, knowledge about the start-up process of their garden, and their opinions on the benefits that their gardens provide. All of the interviews were transcribed, coded, and compared to other academic studies as well as garden case studies from other U.S. cities. The main factors for establishing gardens were analyzed with the data acquired. The overall results show how these factors play out in Colorado Springs, and what specifically within this establishment framework might be inhibiting the future success of community gardens in Colorado Springs.

Figure 1



<u>Figure 1</u> illustrates most of the current urban gardens in Colorado Springs. The gardeners interviewed represented the Vermijo Community Garden, Westside Community Garden, and Harrison Urban Garden. Two gardeners interviewed formerly belonged to the Bear Creek Community Garden. This map additionally includes school gardens and demonstration gardens, which were not focused on in this study. This was made by Josh Hendrickson using GIS technology at the University of Colorado at Colorado Springs. Used by permission.

The Benefits of Community Gardens

Up until this point, the vast majority of literature regarding community gardens has primarily focused on the significant benefits that gardens bring to their communities. Community gardens can offer many benefits that extend beyond the physical food grown, especially in regards to community building and a local food movement. Gardens can specifically help alleviate the more specific food access and nutrition issues that cities are facing today by getting individuals to actively grow their own food and by providing a significant amount of fresh food (Armar-Klemesu 2000). Gardens also help address broader, local environmental and economic issues (Crossney and Shellenberger 2012). When it comes to the environment, community gardens have been viewed as a mechanism to "green" cities by repurposing underutilized vacant lots (ibid). Community gardens also have the capacity to stimulate the local economy. Informal local "trading and bartering" for land, equipment, seeds, compost, fencing, and educational materials can help rouse the local economy as well as bring different organizations and businesses together (Hall 1989: 30). Formally, increasing local food production through gardens ends up increasing businesses at local nurseries and garden supply stores (Hall 1989). Additionally, community gardens are very cost effective when it comes to managing open space (Hall 1989: 30). By addressing a multitude of issues, the benefits of community gardens are far-reaching.

Another significant benefit that community gardens are known for is building community. Community gardens can ideally be accessible to everyone as a garden

"draws upon individual talents, knowledge and efforts, without such bars to participation at high cost, language barriers, or educational achievement, which may otherwise divide residents" (Schukoske 1999: 357). Gardens are generally found to be "a low-cost and direct means to obtain one of life's basic needs—food" (Lawson 2005: 290). Many gardens today are even built to increase their accessibility. For example, the Westside Community Garden in Colorado Springs has taller raised beds to accommodate handicapped and elderly gardeners (Kelley 2011). The idealism of how accessible community gardens are is a great example of a community-based change that has the potential to move beyond boundaries of age, ethnicity, race, income, and education. Both gardeners as well as academic researchers agree that community gardens help build community capacity, as they have been found to improve and sustain neighborhood and resident health for every member of a community (Teig et al. 2009; Twiss et al. 2003). Gardens can act as a neighborhood place to "resolve conflicts, organize community members, and increase community capacity to address local tensions and concerns" (Teig et al. 2009: 1120). They have the capacity to bring people of multiple backgrounds together simply around the concept of growing food.

Community gardens additionally receive much praise as being a model of local action in regards to environmental, social, and community issues (Lawson 2004).

Recently, and in relative conjunction with the emergence of gardening in Colorado Springs, numerous food initiatives across the country, including increased farmers markets or nutrition campaigns, and even an exemplary garden at the White House, have resulted in an overall grassroots food movement coming to fruition in the United States (Cobb 2011). Tanya Cobb finds that "across America, the grassroots food movement

seems to be arising from a common feeling that we have lost our center" (Cobb 2011: 9). This movement has arisen from more philosophical reasons of feeling disconnected from the food system, to specific nutrition, environmental, and even economic issues (Cobb 2011). Cobb believes that a sustainable food system requires many different initiatives and focuses, but community gardens themselves may be "the first gateway for creating a local food system...they are often an important stepping-stone leading to broader community food action" (Cobb 2011: 40).

While the benefits of gardens are innumerable and far-reaching, not every garden is perfect. Many cases of failed gardens exist with examples of gardens being stripped of its land or gardeners losing interest in belonging to the garden. Most literature has agreed on the rising interest in gardening while focusing on its benefits and acknowledging some failures and limitations. However, up until this point, there has been no specific research conducted regarding how to exactly develop gardens successfully, so they can consistently be of benefit for the long-term. By analyzing the successes and failures of exemplified gardens, while keeping the benefits in mind, this study determines what factors are most significant when it comes to setting gardens up for success, as well as how inherently reliable these factors are on one another.

What makes a garden grow?

In order for a community garden to exist, many different factors must come together to provide a solid framework for establishing and maintaining the garden. This study finds that the most considerable factors to do so are community interest, resource acquisition, and organizational structure. First, a community garden needs a group of

community gardeners; it must have a solid group of interested gardeners who want the space and resources to garden with their community. The second things gardens need is a physical framework and resources to be built upon. They need a site to be located on, as well as funding to acquire the necessary resources to maintain the garden. Third, an organizational structure for community gardens is important to establish. This can range from a committed support system from agencies and institutions to a more general framework regarding how the garden will be managed and maintained over the years.

Many successful gardens have combined their initial grassroots efforts with both physical resources as well as an organization structure from multiple institutional sources, whether through municipal governments, federal agencies, or outside organizations (Lawson 2004). There are many aspects within each factor of community interest, resource acquisition, and organizational structure that can influence the start-up as well as long-term success of community gardens. Because of the importance of each factor, it is worth discussing each of them in more detail.

Starting with the Seed: The Importance of Community Interest

The American Community Gardening Association (ACGA) states in their handbook that "in order for a garden to be sustainable as a true community resource, it must grow from local conditions and reflect the strengths, needs, and desires of the local community" (Lawson 2005: 244). Many studies of different gardens have found that gardens are most likely to reap the benefits of community building and empowerment when community members are involved in implementing the project (Crossney and Shellenberger 2012). Local activists are important to create the passion and interest that a

community will need to successfully and perpetually use a garden. At the same time, local activism can be beneficial to search for and potentially lobby for land and for organizing volunteers and groups for working in the garden (Hall 1989).

Unlike at various times in the past century, community gardens today are not expanding because of federal action or worries about food security. As discussed above, they are starting from the bottom-up with community interest and action, based on the potential benefits of building community and redefining the urban food system. Aside from these broader benefits there are many individual reasons for community members to be interested in joining a garden. Most studies have found it difficult to generalize gardening interest nationally due to small sample sizes and particularities of gardens regarding location and social context (Lawson 2005). However, much anecdotal evidence exists regarding why community members may be interested in gardening. Individual reasons range from people who grew up gardening and want to "reconnect with their rural background" to "first time gardeners who are thrilled with their newfound connection to natural processes" (ibid: 266). Additionally, some people are interested in gardening for economic reasons; some grow their own food to save money, while "others grow gourmet varieties or ethnic vegetables not readily available in stores" (ibid). Overall there are a multitude of reasons for individuals and communities to be interested in establishing community gardens; the key is that this interest is present.

While the benefits are far reaching, not every urban inhabitant will be interested in growing their own food. Outside factors, especially amount of free time, may influence the ability for an individual to be involved in a community garden. The most common examples of failed gardens are almost always the result of a lack of interest. Sometimes, a

city may choose to designate areas for gardens with the idealism of "if you build it, they will come," but many of those gardens did not last, as there was not enough interest from the ground up (Lawson 2004: 171). Especially in the mid-1990s, when many cities and organizations started to acknowledge the broader benefits that gardens offer, some gardens began to be created to target specific populations. A common trend started where nonprofits would "decide to start a garden to help local youth, the hungry, or the homeless" (Cobb 2011: 69). While gardens have been known to bring potential benefits to a wide breadth of society, this idealism fails to include the importance of community interest and willingness to physically maintain the garden (Lawson 2004). A prime example of this was in 1975 when the Boston Parks and Recreation Department decided to double the number of gardens in its jurisdiction. While this is ideally a great move forward to create new gardens and encourage city "greening," the failure to account for community interest in their plan resulted in "resentment, minimal participation, and wasted funds" (Lawson 2004: 169). In general, community gardens must start with the community; it is necessary to have local activism that is committed to start, promote, and maintain the garden.

Sustaining Community Interest

Although community interest is the first step to creating a garden, it is equally as important to maintain that interest for the long-term. One of the largest reasons why gardens are discontinued is a lack of sustained interest (Lawson 2005). Gardens are so dependent on community interest and maintenance that if enthusiasm begins to fade away over time, gardens becomes overgrown, not cared for, and eventually will turn into

blighted land. Gardeners must invest a significant amount of time into the garden, and if gardeners start being too busy to care for it or overall become disenchanted with the concept, then the future of the garden is put in jeopardy (Smith and Kurtz 2003).

Gardeners can lose interest in their plots for a multitude of reasons from a lack of gardening knowledge, to issues with gardens politics, to unrelated outside factors that took priority over their newfound hobby. Tanya Cobb recommends, "to bolster community support, keep the garden good looking year round" (2011: 72). Unfortunately, keeping the garden well maintained requires a lot of work, and many gardeners may not realize the extent of maintenance that the garden requires. While the peak joy of the gardening season is the bountiful harvest, the true gardeners know that "even after the last tomato is eaten the garden must still be tended—old plants taken out, compost turned, new crops planted—if the next harvest is to be even better" (Lawson 2005: 302). When community gardens have been marketed as being accessible to everyone, regardless of gardening background, many members might not realize the amount of work that it truly takes to maintain their garden.

Unfortunately, many gardens tend to face a familiar scenario where "interest and involvement in anything other than actual gardening or socializing gradually slacken, and much of the maintenance and organization work becomes the responsibility of one or more core persons" (Schmelzkopf 1995: 377). A lack of maintenance in the garden, uneven work distribution, and the overall combination of multiple community members working together can additionally lead to a problem with garden politics. Even though gardens have commonly been known to bring people together and help strengthen neighborhood bonds, it is no surprise that conflicts can easily arise about rules of the

garden in regards to maintenance and chores, who belongs in the garden, and many other personality-clashing issues (Schmelzkopf 1995). Lastly, gardeners all have outside commitments that may suddenly take priority over their garden plot. Whether it is a lack of time or moving farther away from the garden, outside factors should be anticipated as a reason for gardener interest to slacken with time.

Starting with community interest and maintaining community interest is essential to establish a community garden for the long-term. From a variety of different reasons for wanting to garden and grow food, a community garden must start with the community.

Once that enthusiasm is harness and maintained, it must be coupled with resources and structure to create a framework with which to build upon.

Building The Garden: Acquiring Resources

The two main physical resources needed to establish a community garden are funding and land. Funding is essential for the costs of gardening tools and materials as well as irrigation bills. When it comes to land, there are certain attributes that make for an ideal space to create a garden such as access to sunlight. However, literature shows that securing the tenure of a piece of land for a garden is often more challenging than finding land to start a garden on, which will be discussed further in detail. The acquisition of both funding and land resources can occur through a variety of mechanisms of support, which can be very site specific. For example, if the garden is being created in a more well-off neighborhood, "people may already have the resources and be savvy about how to get things done" (Cobb 2011: 61). Whereas if the garden is being created in a neighborhood

where people have language or income challenges, then it's critical to find alternative and additional support to acquire the necessary resources (Cobb 2011).

Community gardens need some level of reliance on federal, state, or municipal programs in order to gain support, acquire land, and afford resources (Lawson 2004). Support and partnership with the government is mainly based in the idea that community gardens are a public good that can alleviate many community and social issues (Crossney and Shellenberger 2012). Some federal grants specifically provide funding for community garden projects in conjunction with urban renewal and community development efforts. Municipal governments play a significant role in providing land for gardens, while simultaneously meeting a community need (Henderson et al. 2010). In general, acquiring the necessary resources to establish and maintain community gardens typically comes from governmental support.

Ways to Attain Funding for Community Gardens

Gardens have relatively high initial costs of clearing the lot, testing soil, and building a fence, as well as annual costs of gardening materials, compost, and water bills, among other things (Henderson et al. 2010). Typically, gardens will charge an annual fee for gardeners to cover the costs of the water bill, but gardens still need a significant amount of funding to get started. For example, when creating a community garden as part of the Los Angeles Regional Food Bank, it took \$8,000 just to get started with these initial costs to build sixty plots, which seems relatively typical (Lawson 2005).

When it comes to funding a garden project, the option of grassroots fundraising and seeking donations always exists. Many gardens used to attain funding from raffles, bake sales, cookbook and garden calendar sales, and fundraising events (Lawson 2005). Gardens also seek donations from local businesses, whether it be monetary or contributions of compost from the near-by garden shop (Lawson 2005). Some larger corporations, who are trying to increase their philanthropy efforts, have also recently started donating towards garden projects. Cobb noted one unnamed business that donated \$6,000 towards starting six different gardens in one city, while another corporation committed \$10,000 towards leadership development to start community gardens (Cobb 2011). While small-scale fundraising and acquiring donations can be challenging to accomplish consistently, those options are still relevant when it comes to starting gardens.

Seeking funding has become easier over the past 20 years with the emergence of federal grants that specifically fund community garden projects. The U.S. Department of Food and Agriculture (USDA) has an urban gardening program that offers an "Urban Resources Partnership Grant" (Hamilton 1997). This grant, coupled with donations from local restaurateurs, helped fund the \$8,000 cost of creating the community garden at the Los Angeles Regional Food Bank Community Garden (Lawson 2005). Additionally, under the Department of Housing and Urban Development, "Community Development Block Grants" (CDBG), which are typically used for fixing up sidewalks and gutters, are now providing funds for community gardens as part of a larger community development and urban renewal agenda (Pothukuchi and Kaufman 1999). Many public housing authorities agree with the benefits that gardens can provide for their cities; they overall find gardens to be an effective and cost-efficient urban renewal strategy (Thompson et al. 2007). Other grants exist for community gardens from gardening associations to nonprofits, and many of these grants are starting to focus in on narrower criteria for

community gardens, from whom the garden will be servicing to where it will be located (Cobb 2011). From fundraising initiatives to writing grant proposals, a significant amount of funding is necessary to establish a community garden.

Issues With Finding and Securing Land: Gardens as Temporary Entities

In urban areas, community gardens are typically located on vacant lots or in city lots (Schukoske 1999). In fact, more than one fifth of land in American cities is vacant (Henderson et al. 2010). One municipal policy that can help support gardens is to make city owned land available for garden use (Hamilton 1997). But with this, it is also crucial for the city to secure the tenure of the available land for the gardens. When it comes to supporting community gardens, city laws generally focus on "narrow governmental interests" including providing clear authorization of public lands and limiting time for garden use by establishing short lease periods of under ten years (Schukoske 1999). This current short-term support does not ensure the tenure of community gardens on city lots.

While community gardens seem to be a logical solution to repurpose and "green" vacant lots, city governments across the U.S. are constantly trying to balance how much and what types of public green space should be provided for the community with other city development plans (Voicu and Been 2008). Gardens located in vacant lots share many of the same ideal attributes for residential development, for example, access to sunlight and a central location (Schmelzkopf 1995). When faced with issues of housing shortages and looking into the economic pros and cons of development versus gardens, cities tend to choose the former. In 1998, for example, New York City abruptly auctioned off 114 parcels of land that housed community gardens (Smith and Kurtz 2003). The

former publicly owned garden sites were suddenly redefined to "serve the private interests of housing developers and others who seek to expand the profit potential of the urban landscape" (Smith and Kurtz 2003: 198). Mayor Giuliani's main justification for the auction was that it was necessary to work towards alleviating the housing shortage in the city and that since the beginning the gardens were intended to be temporary uses of city property (Smith and Kurtz 2003). While vacant city lots are ideal locations for community gardens, non-ensured tenure coupled with competing interests of development impedes on the long-term presence of gardens.

One reason gardens tend to be viewed as temporary is due to cities believing that there are better uses for land than gardens, such as building low-income housing developments as seen in the New York City case. Community gardens are generally not legitimized as permanent public resources in the same way as other city entities (Lawson 2004). While other city projects such as creating parks or fixing up streets can produce empirical data about both the social and economic benefits of their projects, many gardeners are "often armed with little more than a heart-warming anecdote about cabbages sprouting amidst urban squalor" (Hall 1989: 34). It can be very difficult to make a legitimate case for the benefits of community gardens while cities must also focus on housing development or economic growth.

However, if cities were to think about how gardens can actually increase neighborhood property value, or qualitatively increase the value of land, then gardens could be legitimized more. A study on "The Effects of Community Gardens on Neighboring Property Values" concluded that gardens, on average, have significant positive effects on surrounding property values. In fact, those effects are "driven by the

poorest of host neighborhoods" where a garden raised neighboring property values up to 9.4% within five years of the creation of the garden (Voicu and Been 2008: 277). On the qualitative side, garden supporters could do more to help cities recognize that gardens act as a solution to vacant and blighted land that tends to harbor criminal activity (Henderson et a. 2010).

Recent Support to Ensure Tenure for Gardens

The general ambiguity about the benefits of gardens as a public good raises many questions about the specific responsibilities of city governments, agencies, and organizations in creating, supporting, or managing gardens (Lawson 2004). Some state and city legislation does include community gardens within its provisions on food production, education, parks and recreation, and social services (Schukoske 1999). Recently, municipalities have increased their assistance and presence in garden programs, whether it is from recognizing the benefits of gardens or using it as a development tool (Voigt 2011). In the past, city governments would solely supply (but not ensure) land for gardens or turn a blind eye to gardens in vacant lots, but today they are taking an active role in creating gardens (Henderson et al. 2010). If vacant lots are not available or creating competition for housing community gardens, city parks are another promising location for gardens, and one of the best examples across the board of how municipalities are helping gardens acquire and secure land is through Parks and Recreation.

Recently, Parks and Recreation departments across the country have started to include gardens in their jurisdiction. In 2008, for example, Sacramento's Parks and Recreation department announced plans to increase the number of gardens in parks as

well as other city properties (Henderson et al. 2010). Many Parks and Recreation officials were in support of the gardens as they saw gardens as having underutilized property maintained rather than leaving it vacant (Francis 1987). Parks and Recreation is supportive of the gardens by providing the land, but they made it clear that they are not responsible for the garden maintenance. They find it important for the garden to be maintained by the community itself (Henderson et al. 2010). Another great example of this is in Houston, Texas. Houston's Parks and Recreation department supports gardens by publicizing them, working with interested community members, and providing land within its parks, but still leaves the garden maintenance up to the community (Henderson et al. 2010). Parks and Recreation departments are generally a good example of a municipal mechanism to help acquire land for creating community gardens.

A different option to ensure land tenure for community gardens is to use other land acquiring methods such as land trusts and conservation easements to preserve the land for the gardens (Schukoske 1999). A land trust "protects land by purchasing the land outright, by contracting ultra-long-term leases, [or by] holding and managing conservation easements that govern how the land can be used by future generations" (Cobb 2011: 63). Land trusts are typically used for conserving wildlands or historic ranches, but recently land trusts have started to work with protecting community gardens in American cities. This effort, although successful, is still very small. Betsy Johnson from the South End/Lower Roxbury Open Space Land Trust (SELROSLT) estimates that community gardens protected by land trusts make up less than 1% of all community gardens (Cobb 2011: 63). This unique solution was what ended up saving the gardens in the New York City; the gardens were purchased by two land trusts and the lots were

never developed into housing complexes (Smith and Kurtz 2003). Overall, increasing the legitimacy of gardens when it comes to land value, as well using more unique options including land trusts for acquiring land, must be recognized and utilized to ensure the perpetual existence of community gardens.

Another more general approach for municipalities to be more involved in supporting community gardens is to make a place for gardens within the city planning process or incorporating gardens into building developments. Typically, urban planners focus on the interconnections among many community facets including all physical, economic, natural, and social factors, while also finding connections between both public and private enterprises (Pothukuchi and Kaufman 1999). By incorporating gardens into a city design and plan, city planners can support gardens by helping to prove their legitimacy and solidify their existence. Additionally, when it comes to building developments, some argue that "agriculture is the new golf" (Cobb 2011: 58). Many housing and public building developments are emerging that are including community gardens in the design from the beginning, which additionally provides a secure site for community gardens (Cobb 2011). Although there have been challenges with securing land, municipal governments, as well as local agencies and federal programs, overall play a large role in allocating resources to community gardens.

Maintaining the Garden: The Value of An Organized Structure

A truly successful community garden program requires interest and commitment from all of the gardeners as well as the agencies that are providing the support for the necessary resources (Henderson et al. 2010). To combine these two factors, an organized

structure is critical to connect the gardeners with the agencies that are supporting them. Bringing in a third-party organization can bridge the gap between municipalities and citizens, and can provide support for some more specific aspects of community gardens that city agencies may not be able to account for. It is generally found that "the gardens with the greatest longevity are typically run by an organized group," as they can provide the necessary structure to set up gardens for success (Simson and Straus 1997).

Community garden programs and organizations can vary in roles that they play when it comes to establishing and maintaining gardens. A survey from the American Community Gardening Association (ACGA) found that the top five services that garden organizations provide are "community organizing, assisting with land acquisition, horticultural assistance, educational programs and resources, and assistance in garden design and layout" (Lawson 2005: 242). These organizations provide a support system for navigating city agencies; they have evolved to "actively [lobby] to raise awareness among policy makers for garden funding and site permanence" (Lawson 2005: 243). Additionally, when it comes to the garden themselves, community gardening organizations are important to create a structure within the garden, by establishing expectations and general rules, to keep the garden organized and maintained so they can serve their purpose and benefit the community that is utilizing it.

A Structure for Support: Navigating Municipalities

As discussed above, municipal governments play a key role in supporting and providing some of the necessary resources for community gardens. However, as gardens are not at the forefront of their agenda, the main two ways for municipalities to help

establish gardens is to allocate resources to existing gardens run by third parties as well as collaborate with other government agencies and non-profits to co-develop gardens (Henderson et al. 2010). With the example of the Parks and Recreation programmatic support, city agencies are more likely to support a garden if a third party will physically manage the garden itself. Additionally, "as gardening organizations have grown more sophisticated...they have had to become politically savvy in order to be included in planning decisions and funding pools" (Lawson 2005: 243). To gain support, garden programs need to align with the municipal government's capacity for implementing and sustaining gardens, and many program administrators are able to navigate through the city agencies to take advantage of the resources available to them (Henderson et al. 2010). Gardening organizations have actively begun to raise the awareness necessary for city agencies to support gardens, and they have learned how to navigate city agencies to find and allocate the resources needed for creating their gardens.

Community garden organizations and programs can take many different shapes and forms. A number of neighborhood gardens will simply build coalitions or neighborhood organizations (Simson and Straus 1997). Other community garden organizations are unincorporated associations that are either independent entities or under the auspices of a pre-existing community association (Schukoske 1999). Some gardens might act under the name of a community center, church, or school, while others might independently become their own business or non-profit. Certain organizations will become a non-profit to increase their ability to receive grants or to obtain liability protection (Schukoske 1999). Other organizations might become a business to fund themselves, like Community Groundworks and Farmworks in Madison, Wisconsin.

Community Groundworks is an organization that is dedicated to building awareness about local food by supporting gardens (Cobb 2011). In order to fund their mission, they created Farmworks, which is a garden design business that sells its designs and services. (Cobb 2011). Some cities have created their own gardening organizations. A specific example of this is Operation Greenthumb in New York City. Started in 1978, Operation Greenthumb is run under Parks and Recreation and currently has over 600 gardens with a total of 20,000 gardeners (Henderson et al. 2010). This organization, which is known to be one of the country's most successful city-run community garden programs, helps with technical support, educating gardeners, administering leases on city-owned property, and administering CDBG grants (Henderson et al. 2010; Lawson 2004). Operation Greenthumb acts as a liaison between the city and its gardeners. By navigating the city's agencies, it acts more as a support to gardeners rather than an entity to build gardens (Schmelzkopf 1995). By helping especially to administer grants and leases, this organization is exemplary of how to build a structure of support for gardens in terms of working with municipalities. In general, whether it be a city-sponsored organization, a neighborhood organization, a non-profit, or a business, some sort of third-party organization is important to fill in the gap between municipalities and communities when it comes to successfully establishing and maintaining a garden.

Due to the increasing presence of community gardens, many cities have begun to develop multiple community garden organizations. Additionally, because of the wide range of interests that can apply for growing food, garden organizations can easily connect with other environmental organizations, food banks, schools, churches, and neighborhood associations (Lawson 2005). It is important for many of these gardening

organizations and programs to work together to gain power in numbers "rather than competing for the same resources" (Lawson 2005: 243). Community gardens are meant to benefit the community, not to be in competition with each other. In addition to the existence of a garden organization to provide the structure to support gardens, the collaboration between multiple organizations, agencies, and initiatives will overall "help build broad-based constituency, and provide long-term, consistent support of community gardening as a norm" (Twiss et al. 2003: 1437).

Organization Within the Garden: Setting Expectations and Developing Leadership

While it is crucial to bridge the gap with municipalities to help acquire resources, it is equally as significant to create a structure within the garden that works well for the community. As previously discussed, dwindling community interest can be a major hindrance for the longevity and success of community gardens. Garden organizations can play a crucial role in creating a structure within the garden that can help encourage maintaining the interest of the gardeners. As Lawson found, community garden organizations "must stay in touch with the gardeners and the community at large to evaluate whether the garden satisfies their personal reasons for involvement" (2005: 298). By creating an orderly structure within the garden, garden organizations can not only help keep the garden well maintained and organized, but also they can encourage self-reliance of the garden for the gardeners (Lawson 2005). Especially because the community gardeners are the most important component of the community garden, garden organizations need to provide assistance in order for the gardeners to "build the garden themselves and have a sense of ownership over it" (Lawson 2005: 243). It has been found

that focusing on establishing expectations for gardeners, as well as a building a reliable leadership structure for the garden are two key ways for garden organizations to keep up community interest on the gardeners' end.

A great example of a garden organization that focuses on building structure as well as self-reliance for the community is the P-Patch Community Gardening Program in Seattle. P-Patch provides and helps manage over 70 community gardens comprised of over 2,000 gardeners (Cobb 2011). P-Patch sets expectations for its gardeners, so each community members knows what they are getting themselves into from the start. For example, each gardener is required to contribute eight hours of their time to maintain the public spaces of the garden throughout the growing season (Cobb 2011). Setting expectations for garden maintenance is important to encourage accountability for the gardeners. By setting these expectations, P-Patch has been successful in helping to create an organized structure within their gardens in order for their gardens to sustain themselves.

P-Patch additionally prides itself on cultivating volunteer leaders, and thereby building the garden's "long-term civic capacity" (Cobb 2011: 60). It does a great job of ensuring that the leadership structure it develops within the garden can sustain itself. Rather than stepping in and leading the gardens themselves, P-Patch uses its staff to support in-garden leaders. The staff at P-Patch helps the leaders develop by helping them to solve the problems that may arise in the garden or by developing new resources for them (ibid). This is crucial as in many cases as community garden projects and organizations that relied on outside sources of leadership found that "leadership dissipated after each crisis was resolved" (Lawson 2005: 298).

Consistent and well-defined leadership can help maintain the garden as well as bolster continued interest and enthusiasm from the gardeners (Simson and Straus 1997). Leadership within the garden can promote "mechanisms for getting tasks done, communicating effectively, and promoting membership and belonging" (Teig et al. 2009: 1120). P-Patch's trained garden leaders are expected to ensure that all of the plots in the garden are maintained properly; they are the mechanism to hold each gardener accountable to their set expectations (Cobb 2011). The leaders organize periodic meetings and workdays to identify the important responsibilities of the garden and encourage teamwork to accomplish all of the necessary tasks (ibid). It is also crucial for garden leadership to be relatively stringent. For example, in P-Patch's gardens, if gardeners do not maintain their plots to the extent that it is inhibiting the overall maintenance of the entire garden, then they are given notice for eviction, which can then make room for other interested community members who are on the waitlist for the garden (ibid).

Garden leaders are also important to encourage community bonding within the garden. They can organize events and workshops to strengthen community bonds as well as educate gardeners about skills they may want to use in the garden. While periodic meetings or workdays might be necessary to physically maintain the garden, one study found that events such as potlucks and workshops can strengthen community bonds even further, which may help keep up interest in the garden (Simson and Straus 1997). For both leaders and gardeners, their experiences will become enhanced through these events as well as experiential learning in the garden (Twiss et al. 2003). An overall organization of the garden, with a well-defined leader maintaining that organization, may be what it

takes to keep communities perpetually interested in their gardens by keeping the gardeners engaged, interested, and held accountable.

It is also important to develop a leadership structure that will work for everyone; some gardeners may like stringent rules, while others might not want such governance in an activity that is solely their hobby. Some find that a structure comprising a group of defined leaders can help with this. For example, one garden in Denver found "if you have committees and people working on different issues so that you balance out somebody who is too verbose or too, you know, not strong enough in certain areas...everybody's strengths are balanced by the ones that don't have those strengths" (Teig et al. 2009: 1120). It is overall important for a community garden organization to work with each garden specifically to develop a leadership structure that makes the most sense for the group of gardeners that they are working with.

Setting Up Gardens for Success: A Recap

While it starts with the community and it is built with the physical resources, creating an organized structure for community gardens is crucial to establish gardens with longevity in mind. Typically, this structure is set up by a community gardening organization or program, and works with other agencies and institutions as well as within the garden to keep the garden maintained and the gardeners happy. Unfortunately, while some community garden programs have been known to achieve this, many find that gardening organizations typically have a "lack of rigor that undermines their permanence" (Lawson 2005: 301). An ACGA survey found that only one third of community gardens lasted longer than ten years, which seems relatively low (Shukoske

1999). To ensure the tenure of community gardens, a solid and consistent sense of structure, as well as the collaboration and cooperation between the community, supporting agencies, and the organization that provides the structure is essential to set community gardens up for success.

Colorado Springs: A Case Study

Establishing Gardens in Colorado Springs: At First Glance

The theoretical analysis of what it takes to sustain gardens can be applied to analyze the potential longevity and success of community gardening in Colorado Springs. With the city's small but growing interest in gardening, Colorado Springs represents a prime example of what it takes to successfully establish gardens, as the factors of community interest, resource support, and organized structure are clearly at play. Multiple city officials of Colorado Springs as well as gardeners who belong to community gardens were interviewed about their experiences with community gardens, including both the start-up process and the management of the gardens. The interviews revealed that community interest and mechanisms for resource support are present in Colorado Springs when it comes to establishing community gardens. However, in terms of longevity, a lack of consistent structure for supporting and maintaining community gardens could hinder the long-term success of the gardens.

A Budding Interest: The Importance of Community Interest

Most literature agreed that the first step to creating a community garden is to find an interested community who wants it. Ten out of twelve interviewees acknowledged this importance of community interest in regards to starting a garden, and they mostly believe that there is plenty of interest in gardening in Colorado Springs. Dan,² who belongs to the Westside community garden, recalled, "last year was the start up year, and there was a need obviously, otherwise they wouldn't have put that garden in, so it was a pent up demand, and there was lot of enthusiasm." More than half of the gardeners found this high demand in the first year of their gardens; there were huge waitlists to get a plot. Sarah, who belongs to the Vermijo community garden, was originally on a waitlist at the Westside community garden. Currently, there still ten people on the waitlist at the Westside community Garden, while the current members are additionally asking for more beds to garden in. The Harrison Urban Garden has a waitlist of 5 people as well (Rich Young, PPUG Community Coordinator, Personal Communication, February 28, 2013). Generally, there has been a growing amount of enthusiasm and desire from the community to put gardens into place.

The importance of community interest has also been shown in Colorado Springs through the examples of failed gardens. Christian Lieber, from Colorado Springs Parks and Recreation, recalled a community garden at Wildflower Park that didn't make it through the first season. That particular garden seemed like a great opportunity because it was in a low-income area, and the city hoped that the garden would be of benefit to the surrounding community. While there were enough resources as well as support from Parks and Recreation to originally start the garden, they found that the community really didn't want to or couldn't invest their time, and the garden did not last. Christian thought

² All names of gardener interviewees have been changed.

that the people in the community were "struggling too much to also take on growing your own food." While Christian is open and willing to support gardens through Colorado Springs Parks and Recreation, as will be discussed later, in order to offer support, he first wants to see that the "neighborhood [wants] it internally."

From Finances to Food: Reasons to be Interested

There were many reasons why gardeners are interested in starting or joining community gardens. On the individual level, out of the gardeners interviewed, the main reasons for joining a garden involved having the garden be a good deal financially, liking gardening as a hobby, enjoying the fresh food grown, and meeting their community. Two gardeners, Jack and Sarah, find their garden memberships to be very affordable (typically ranging from \$15 to \$25 for a plot annually), and Sarah believes that it is the financial aspect that will really draw people in. Other gardeners joined to continue their hobby of gardening. Some started gardening as a child and wanted to continue their tradition, while others purely enjoyed the therapeutic aspect of gardening outside in the sun. These interests were generally in line with the anecdotal evidence found from previous studies about community gardens, ranging from childhood gardeners who wanted to "reconnect with their rural background" as well as gardeners who wanted to save money from growing their own food (Lawson 2005: 266)

Many gardeners conveyed an interest in joining their gardens beyond the economic and physical benefits. About half of the gardeners interviewed remarked that they were interested in joining their gardens for the food, whether it is to know where your food comes from or for the taste of their homegrown produce. Jennifer, who belongs

to the Harrison Urban Garden, stated, "Well, first it started out that I wanted to try different types of unique foods to grow and now its more like I want to make it a way of life so I know where my food comes from." This relates back to the original and general concept of how many communities and individuals nationwide are conveying a desire to grow their own food and create community gardens in conjunction with the grassroots food movement. Community gardens themselves may be "the first gateway for creating a local food system" as they have been found to provide benefits beyond the food grown that can lead to wide-ranging community food action (Cobb 2011: 40). When discussing the creation of the Ranch Community Garden in Colorado Springs, Lisa mentioned how Sander, the original creator of the garden, wanted to start Ranch because "he feels people have lost touch with where their food comes from and its not healthy for the environment or for us...he thinks its important for people to be able to raise their own food." Even if some gardeners did not originally join as part of this movement, these grassroots and local food themes emerged throughout their experiences. All twelve gardeners remarked how some of their favorite parts of belonging to the garden had to do with knowing where their food came from by enjoying the fruits of their labor and the taste of their homegrown food.

In addition to enjoying the fresh and local food aspect of the garden, seven out of twelve gardeners discussed how he or she sees that theme intertwined with meeting his or her community. Jennifer believed that everyone who joined a community garden "joined for both aspects: raising food and meeting their community." Common literature found that community gardens help build community capacity (Twiss et al. 2003). While Colorado Springs is not known for its sense of community, seven out of twelve

interviewees commented on how they truly see community-building happening in their gardens. Ranch Community Garden even made their slogan "building community."

Half of the gardeners acknowledged the diversity of community members who belonged to their gardens. The gardens throughout Colorado Springs seem to consistently bring people from all different backgrounds together to garden. Without the limitations of high cost or educational background, gardening draws more upon individual qualities and efforts (Schukoske 1999: 357). Jennifer believes this diversity of backgrounds helps build community within her garden; "I think it brings people together... different people, classes of people, its just interesting and its not just about gardening, you also learn about other peoples lives and experiences." She also noted, "its really fun because its like a community place where you can meet a lot of people and share a good experience." Joan, who belongs to the same garden as Jennifer, agreed in saying "people are so supportive, it's like everybody gets really excited about each others' successes and that's really fun."

From the more personal reasons of finances as well as gardening as a hobby, to the larger themes of the grassroots food movement and community building, it is evident that there is a budding amount of community interest in community gardens in Colorado Springs. The wide variety of reasons for gardeners to be interested, combined with a significant amount of overlap of those interests, represents enough evidence of community interest in order for more gardens to be created. While there is no significance evidence to show that Colorado Springs will become the next hub for community gardening, a general interest in gardening exists within the community, as additionally supported by the garden waitlists. This up-and-coming interest and

enthusiasm is worth fostering into a supportive system of community gardens, yet it is equally as crucial to maintain this interest to in order to develop gardens successfully.

A Pattern of Dwindling Community Interest

Interestingly enough, while a sense of community interest was found, six out of twelve gardeners found a decrease in enthusiasm and participation from the community after the initial year. Dana, at the Westside Community Garden, acknowledged that while there was a waiting list to get a plot the first year, the next year they saw more abandoned plots. Laura agreed by saying "what you see generally is great enthusiasm at the beginning of the year...and then people lose interest or don't know enough to keep their gardens looking good." Because gardens are so dependent on continual maintenance by the gardeners, if people start to lose interest, the overall success of the garden is jeopardized (Smith et al. 2003). The main reasons found for dwindling community interest were lack of gardening knowledge, garden politics, and unrelated outside factors.

While gardening is ideally an accessible hobby, many people with a lack of gardening knowledge may think that it's a lot easier than it turns out to be, and they don't realize the level of commitment that it takes to keep their garden looking good (Smith and Kurtz 2003). Dana recalled that a woman at the Westside Community Garden found that maintaining her plot turned out to be way more work than she originally anticipated, which hindered her from renting another plot the next year. Dana believes that "to a lot of people the idea [of gardening] is really cool, but most of us, until we get started with it, don't realize the level of commitment."

The amount of commitment can even increase year after year. In the start up year, the soil amendments are fresh, it might be a good weather year, and the garden overall starts out with a clean slate. But the next year, due to weather patterns or general wear and tear, more critters, pests, and diseases are likely to arise in the garden. Dan, who also belongs to the Westside Community Garden, found for this to be the case. He believes that because they had such a successful start up year, many gardeners got used to the idea that gardening is easy. However, the second year, because there wasn't a cold enough winter in addition to accumulating wear and tear on the garden, the garden was much messier and had a horrible bug problem. According to Dan, this "made a lot of people rather demoralized, after it was such a good year last year." When it comes to both bolstering and maintaining community support it is important to "keep the garden good looking year round" (Cobb 2011: 72). Unfortunately, due to a lack of gardening knowledge, the Westside Community Garden could not achieve this, which negatively affected the enthusiasm of the gardeners.

This issue can additionally lead to a domino-like effect on the gardeners' attitudes. Dan also expressed concerns about how gardeners not knowing how to maintain their plots will eventually affect his own plot. He found that if there is a "lack of people taking care of the basics...that means you are susceptive to disease and pests from your neighbor." Samuel, who belongs to the same garden, had issues with this specifically; he contracted diseases affecting his heirloom tomatoes and his squash because "people have powdery mildew but didn't do anything with it...it just spread all over the garden." A lack of garden knowledge can affect an individual gardener's interest as well as their neighbor's motivation. Whether a gardener becomes discouraged

from their crop failures, or a neighbor becomes displeased with the spread of diseases from their neighbor's crops, the issue with continual maintenance can greatly influence maintaining community interest within the garden. Finding ways to reduce these issues and maintain gardener interest will be key to think about when establishing the gardens so they can be of benefit to the community.

All of these factors can additionally lead to issues with garden politics. Whether an annoyance emerges because some gardeners are not maintaining their plots or a clash of personalities exists in the garden, garden politics can result in members losing interest in their garden. Jack, from the Vermijo Garden, noted how his main reasons for not wanting to continue a plot in the future would be if people in the garden started fighting or conflicts started arising. Like any small community, there is naturally a difference in personalities that can lead to social conflicts. As Laura put it, "there's everyone from the experts to the village idiot...and everything in the middle." At ten out of twelve interviews, each gardener acknowledged at least one form of drama in the garden. For example, Laura mentioned an annoyance with one gardener "who thinks he's being very helpful" when he is really doing more harm than good. In another case, two different gardeners both switched to new gardens from the Bear Creek Garden because they were having difficulty getting along with the woman who was in charge of the garden. Sarah left the Bear Creek Garden for just that reason. She claimed that "there was too much structure," as she didn't agree with the stringent rules about height allowances for trellising her sunflowers. She even recalled how there have been numerous other conflicts within that garden in the past; there was even a blog post about it when there was uproar

over the leader kicking out a member of the garden because he was "challenging her authority" (Vogrin 2008).

But some gardeners might like that sort of structure that the Bear Creek Garden leader had. Samuel thinks that his garden could use a little bit more policing; he doesn't appreciate when the "ladies in wheel chairs" forget to lock the gate, or when kids are running around the garden. It can be difficult to compromise on the different wants and desires of the gardeners when it comes to maintaining the garden. But when interest and involvement begins to slacken, a sense of organization and structure is necessary to keep the garden maintained (Schmelzkopf 1995). Finding this balance will play a key role in developing a leadership structure for the gardens, as will be discussed later. Due to the current issues found in the gardens, a structure for this middle ground has not been achieved, and it is foreseeable that these issues with garden politics can hinder a gardener from returning the next year.

Lastly, unrelated outside factors can influence maintaining community interest. The largest outside factor found from the interviews was gardeners living too far away from their gardens to truly keep up with their plots. Samuel thought that a lot of the plots at his garden were abandoned because "if you're living way out by the Air Force Academy, it's a pretty big deal to come back to the garden." Some other outside factors worth noting were the drought and the Waldo Canyon Fire this past summer. Whether people were evacuated or "just had other things on their mind," any sort of outside factor can lead to a garden plot falling lower on the priority list for a gardener.

This overall lack of long-term community interest due to lack of gardening knowledge, garden politics, and outside factors will be important to consider when

analyzing the resource support and structured organization for the gardens of Colorado Springs. It could turn out to be less of an issue with long-term community interest and rather organizational issues with advertising, management, or education. For example, while there were abandoned plots this past year at his garden, Greg believes that "there's always interest...I don't think that it wasn't people didn't want to garden, it was more they didn't do much advertising; they figured people would come if its here, but I think it would help to do some publicity." Organizational components of the garden play a key role in sustaining community interest, especially by increasing educational opportunities and developing a leadership structure. It is overall important to keep the issues found with sustaining community interest in mind when developing an organized structure for community gardens throughout Colorado Springs.

Acquisition of Resources: General Support and Legitimacy

The interviews with various stakeholders throughout the city, including representatives from PPUG, Parks and Recreation, and the Department of Housing and Urban Development, revealed that there are some interesting initiatives happening in Colorado Springs that show increasing provision of the resources necessary to establish community gardens, especially in regards to funding and land availability. According to Larry Stebbins, the founder of PPUG, when it comes to the idea of establishing community gardens, "the city is ecstatic...for them these gardens are cleaning up these areas...we are taking unused pieces of city land and turning it into public good." From the support shown in the following examples, it seems that there is enough proven

legitimacy for community gardens to harness the necessary support to physically build them in Colorado Springs.

Existent Funding Opportunities in Colorado Springs

When gardens were first starting in Colorado Springs about 5 years ago, they were mainly funded from grants, but now many of these national grants seem harder to obtain (Larry Stebbins, Personal Communication, September, 17, 2012). With the general evolution of community gardens and the grassroots food movement, competition for garden funding arose with other cities while funding criteria became stricter. According to Larry, today's grants require more specific criteria for community gardens. For example, grants may have criteria regarding whether the gardens are going to service low-income areas or schools, or if the gardens are going to have a health component to address obesity. Also, when competing against other cities for these funding opportunities, Larry doesn't believe that Colorado Springs looks very good in regards to the criteria; while Colorado Springs has disadvantaged areas, "the entire city is not entirely economically depressed...especially when compared to other areas such as Detroit." Lisa and Sander had similar issues when applying for grants to start the Ranch Community Garden because many of the national grants were focusing on connecting gardens with schools, or they would not be eligible for grants because their garden was on the property of a church.

Despite these issues with obtaining more general grants, Community

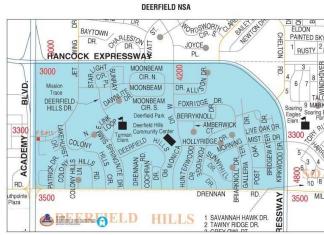
Development Block Grants (CDBG) are in fact available to start gardens in Colorado

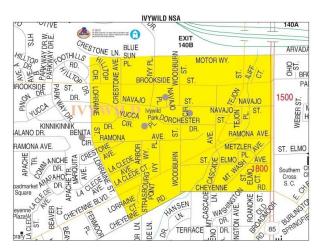
Springs. As previously mentioned, CDBG used to be utilized for sidewalk and street light

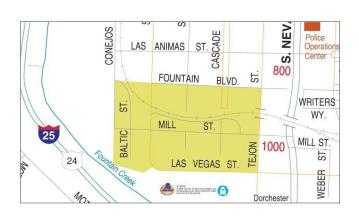
repair as well as trail development, but now this grant is available to be put towards community garden developments as part of a larger community development and urban renewal agenda (Pothukuchi and Kaufman 1999). Colorado Springs is already an entitlement community, so according to Beth Diana from the Department of Housing and Urban Development, there is no need to apply for these grants, as specific projects can easily receive the a sliver of the 2.3 million dollars of available funding. In fact, six specific neighborhoods in Colorado Springs with CDBG funding available are shown in Figures 2-6. The only significant qualifications are that the neighborhood with the garden must be 51% or less median income by area, and because CDBG has national benefits, it is easier to receive the funding if the garden is located on city owned property (Beth Diana, Personal Communication, August 16, 2012). \$23,000 of this funding is currently being used for the first time for the Mill Street Community Garden, and the rest of the available funding will hopefully be put towards more community garden projects in the future (Vogrin 2012). While some grants have generally become harder to obtain in Colorado Springs for creating gardens, the availability of CDBG is a great resource that is ready to be utilized.

Figures 2-6









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Figures 2-6 show areas in the city that have CDBG funding available to start gardens. Beth Diana, from the Department of Housing and Urban Development, developed these maps to highlight the next potential areas for gardens in Colorado Springs. She had additionally visited these areas and described specific sites to Larry Stebbins that she believes might make good garden locations, such as parks and vacant lots. Used by permission.

A different way to think about funding gardens is to reduce the start up costs. For Colorado Springs, the summer of 2012 marked a turning point for starting gardens because Colorado Springs Utilities decided, after much persuasion, to waive the tap fee for irrigating the gardens. The original fee for tapping into the water system was \$9,200 dollars, which was a huge hindrance for starting gardens. Larry had a large hand in making this happen; he had some personal connections at Colorado Springs Utilities, and he also presented to them the reasons why a waiver for community gardens would benefit everyone. They agreed on a temporary waiver, specific to community garden projects. According to Larry, "it saves [the gardens] tremendous amounts of money so now [the gardens] can spend it on things that show." This specifically helped reduce the start-up cost for the Mill Street Garden, which was originally anticipated to cost \$27,000 (Vogrin 2012). Gardeners are still expected to pay for the water bills, which are included in the plot rental fee, but now that the extremely high start up cost is waived, Larry finds that he now has the opportunity to look at more areas of town that didn't seem like options for gardens before because of funding constraints.

If grants are not available, grassroots fundraising is always an option, and this strategy was effective at providing the funding for one garden in Colorado Springs, the Ranch Community Garden. Because Lisa and Sander were having difficulty meeting eligibility requirements for grants, they decided to take a unique approach to funding their garden by selling advertisements. While fundraising for gardens in the past typically involved raffles, bake sales, cookbook and calendar sales, and fundraising events, it worked out well because Lisa had just started her real estate career and was looking for

an advertisement opportunity. In the end, they had done all of their fundraising for the garden through advertisement placement on the fences and raised garden beds.

Donations from non-profit institutions have also been used for starting gardens in Colorado Springs. Many outside organizations involved in local food, community development, and public health are starting to invest some of their resources into garden projects. The main example of this in Colorado Springs is Livewell Colorado, which works with public health issues, especially with educating about obesity. Livewell donated \$40,000 to the Harrison Urban Garden, which went toward building a greenhouse that would be maintained by the gardeners while also used as an educational opportunity for the school next door to the garden (Kelley 2011). While Joan, who belongs to the Harrison Urban Garden, wasn't aware of the specific monetary value of what Livewell contributed, she acknowledges how significant their contribution was. "I don't think we would exist without Livewell," she stated.

This example of support and collaboration with Livewell is a great example of how gardens are a key part of the broader themes of local food systems, community building, and public health issues. Because of these broader connections and the overall wide range of interests that can apply to growing food, community gardens can easily connect with other health and environmental organizations, food banks, schools, and many other institutions to receive support, whether monetary or not (Lawson 2005). These forms of support show how the criteria now required for receiving grants for gardens are at play in Colorado Springs, and perhaps some better coordination and organization can quantify a lot of these initiatives and benefits that would make grants easier to obtain. In general, while infinite amounts of funding are not available in

Colorado Springs for gardens, the availability of CDBG grants, as well as institutional support and creative funding solutions show a prominent sense of support for gardens in regards to funding.

Land Availability and Tenure in Colorado Springs

Typically, gardens are located on vacant lots or in city parks, which is in line with the current garden locations in Colorado Springs (Hamilton 1997). There are many vacant lots and areas throughout Colorado Springs that have the right criteria and physical characteristics for starting a garden. Within the Department of Housing and Urban Development, Beth Diana worked to map out 5 areas of the city that have secured funding availability and potential garden sites, which are shown in Figures 2-6. Larry Stebbins is the typical person who works on finding these areas to start gardens, in which he has overall had success with in the past. He normally goes for the "easy, vacant, usable land" that are close to water resources, and the city is generally supportive of repurposing those areas. However, Larry also thinks that these vacant lots are going to run out soon, which is why he is pushing to develop gardens in other areas, especially parks, building developments, and churches.

City parks were found to make for good garden locations, and cities including Sacramento and Houston have been generally successful in incorporating community gardens into their Parks and Recreation Programs (Henderson et al. 2010). A couple of community gardens already exist in city parks in Colorado Springs, including the Vermijo Community Garden. When it comes to expanding this use of available parkland, the creation of the Parks Solution Team is an exciting and promising form of support.

The Parks Solution Team was formed with the mission of repurposing 10% of 840 acres of irrigated parkland. They included community gardens as one of the possible solutions to reach their goal (Richard Skorman, Personal Communication, July 13, 2012). From interviewing Christian Lieber, a representative for Parks and Recreation, it seems that Parks and Recreation is on board to incorporate gardens into their planning. According to Christian Lieber, Parks and Recreation mainly requires that the public has equal access and opportunity to belong to the gardens and that the gardens cannot displace ball fields or other activities. Parks and Recreation is also not willing to completely manage the gardens on their own. While they are willing to provide the land, they require an organization to enter into agreement with who will be in charge of managing the gardens. The primary partner organization that Parks and Recreation has worked with in the past, for example with the Vermijo Community Garden, is PPUG (Christian Lieber, Personal Communication). This is similar to the examples from Sacramento and Houston where Parks and Recreation is generally supportive of community gardens by providing land, but they are not responsible for the garden management and maintenance (Francis 1987; Henderson et al. 2010). Parks and Recreation, in conjunction with the Parks Solution Team, is willing to provide land for creating gardens, which shows an exciting prospect for the future of garden land availability in Colorado Springs.

Incorporating gardens into building developments as well as existing developments is additionally a promising and likely way to obtain land for gardens in the future in Colorado Springs. Some existent gardens follow this model, for example, the Ranch Community Garden was built on the property of the Beth El Mennonite Church, and the Westside Community Garden was built next to the Westside Community Center.

The Ranch Community Garden obtained land from the Beth El-Mennonite Church. The church owned 5 acres of land, which was more land than they had a purpose for, and Lisa and Sander saw that as a perfect opportunity and place to build their garden. "The pastor and the congregation were very supportive of the concept of a garden," Lisa said. According to Lisa, the connection to the church does not factor in creating exclusivity within the garden; anyone can still rent a plot at the garden, regardless of whether they belong to the church. Some other potential opportunities for incorporating gardens into institutions is to include community gardens in building development plans. For example, the Ivy Wild School is currently undergoing renovations to become a neighborhood center. During the planning phases, the architect for the project approached Larry about incorporating a community garden into the building plans. Other cities have begun to do this, as many housing and public building developments are starting to include community gardens into their designs (Cobb 2011). Community gardens "are perceived by public housing authorities as a cost effective strategy for community renewal, empowerment, and capacity building" (Thompson et al. 2007: 170). If these benefits of gardens were to be put to use more, and community gardens were to be incorporated more into urban planning processes for Colorado Springs, more secure land opportunities could arise for creating more gardens. Larry overall sees this path of becoming "incorporated with the build out" as the future for land availability when it comes to community gardens.

Ensuring Longevity: Loopholes That May Inhibit Land Tenure

While Colorado Springs seems very supportive of gardens throughout many of these examples in regards land availability, some small loopholes that exist in the process for obtaining city land show that the city may have a temporary outlook on the existence of gardens. When starting the Mill Street Garden with the CDBG, Beth recalled having to apply for a revocable license (which only lasts for 3 years) as well as a temporary use permit. The Temporary Use Permit states that it is "a mechanism by which the City may allow a use to locate within the City on a short term basis and by which it may allow seasonal or transient uses not otherwise allowed." While these forms of paperwork are mainly for legal purposes, their requirement shows how the city may have a temporary outlook on community gardens. This relates to issues that arose in other cities where "narrow governmental interests" resulted in uninsured tenure of gardens because of short lease periods (Schukoske 1999). Lawson recommends that when it comes to finding land, it is important to pay attention to the process for site procurement, as "there is no single, foolproof mechanism to secure land for gardens" (Lawson 2005: 299).

In addition to this short-term outlook, another issue facing the longevity of gardens in regards land availability is that while there are many promising ideas about where gardens can be located, they are mostly all still ideas as the Parks Solution Team's mission has yet to result in any garden developments. Christian noted that at the start of the Parks Solution Team, Parks and Recreation hired a team of architects, planners, and landscapers to map out the feasibility of garden sites within the city's parks. However, no developments have yet to come out of those efforts. While the general support and land is available from Parks and Recreation, the future of community gardens being incorporated

into parks is not concrete if these ideas and prospects do not soon turn into specific projects and initiatives.

These initiatives might be carried through more consistently if gardens were more legitimized, as community gardens are generally not legitimized as permanent public resources in the same way as other city entities (Lawson 2004). Gardens have the potential of receiving a similar public good status if "they were to be evaluated in light of their benefits...a more realistic approach for a garden may be to specifically identify the resources it provides and how those resources specifically benefit neighborhoods [through themes of] food, recreation, income, activism, and environmental restoration" (Lawson 2005: 294). Effectively communicating the benefits and legitimacy of gardens are important to keep in mind when developing an organized structure for a community garden program in the city, especially in regards to creating a structure that will successfully bridge the gap between the municipal and institutional support for resources with the community.

Developing An Organized Structure for Gardens in Colorado Springs: The Case of PPUG

As previously discussed, community gardens need an organized structure to thrive, which is typically in the form of a community gardening program or organization (Henderson et al. 2010). Across the board, the most successful gardens are managed by an organized group of people (Simson and Straus 1997). A community gardening program is critical to work with other agencies to allocate and acquire resources, and to develop a structure within the garden to keep the gardeners organized and involved.

While there are food-related non-profits and initiatives in Colorado Springs, PPUG is the go-to non-profit for community garden projects. In fact, besides the long-term presence of the Bear Creek Garden, the true start and growth of community gardens was due to the creation of PPUG (Kelley 2011). PPUG does most of the start up work from finding funding resources and sites to building the raised beds and bringing in the initial soil amendments. They overall act as a middleman between the communities and the municipal government.

With the existence of PPUG along with its collaboration with other organizations, there is a relatively solid framework of structured organization in place for community gardens in Colorado Springs. However, there are certain aspects within this structure that can threaten the longevity and success of community gardens without improvement. While PPUG has been successful with starting up gardens, especially by working well with the City to acquire resources, the interviews revealed a lack of consistency in their structure for managing the gardens that could potentially influence the future success of the gardens.

Navigating Municipalities: PPUG's Role in Acquiring Resources

When it comes to the garden start-up process, PPUG plays many similar roles as Operation Greenthumb in NYC, especially by helping with the technical support of finding land and funding. PPUG helps find and apply for grants to cover the start-up costs, and helps search and secure sites for gardens to be located on (Larry Stebbins, Personal Communication; Kelly 2011). Community garden organizations are important to provide a support system for navigating city agencies; they have evolved to actively find

mechanisms to receive garden funding and site permanence (Lawson 2005). Throughout the past five years Larry has gained much experience with working with the City of Colorado Springs as well as grant administering agencies, especially when it comes to acquiring resources. For example, Larry has been working closely with Beth from the Department of Housing and Urban Development to start taking advantage of the gardening component of CDBG. Additionally, the tap fee would have never been waived if it weren't for Larry lobbying to Colorado Springs Utilities and convincing them that the benefits of community gardens outweigh the costs of tapping into the water system. Aside from funding, Christian from Parks and Recreation claims that they are ready to support gardens by entering into a co-development agreement with another organization, and they typically use and trust PPUG. In many other cities, it seems that "as gardening organizations have grown more sophisticated...they have become politically savvy in order to be included in planning decisions and funding pools" (Lawson 2005: 243). Within just five years PPUG has already found its role in navigating the appropriate agencies to take advantage of the resources that are available for developing community gardens.

PPUG also works with many different non-municipal agencies and organizations throughout the city to collaborate on starting gardens. PPUG is now part of the Pikes Peak Community Foundation, which ties them to their other organizations involved in local food and nutrition initiatives such as Venetucci Farm and Pinello Ranch. Many different institutions and organizations are also selectively involved with PPUG's work based on specific locations of gardens. For example, Woodmen Valley Chapel, although located on the other side of town, was very helpful in starting the Westside Community

Garden. They helped set up 100 volunteers who helped build all of the raised garden beds in one morning (Larry Stebbins, Personal Communication). The Westside Community Garden is also tied to the Westside Community Center, which is helpful to provide a common area as well as a restroom. The Westside Community Center is also a pick-up location for the Westside CARES food pantry, which now provides fresh vegetables from the garden to its users. At the Harrison Urban Garden, Livewell contributed the funds to build the greenhouse, as already discussed. In addition to Livewell's support, the Harrison School District 2, the Harbor House Collaborative (an addiction-treatment center), the Jerusalem Project (an interfaith peace organization), as well as BizKidz International (an educational group for children) all had a helping hand in supporting the garden (Kelley 2011). Many of these other organizations have realized the wide range of interests and benefits involved in growing food, and their collaborations have been mutual as the gardens provide many educational benefits to their own individual missions (Lawson 2005). A specific example of this mutual benefit is that the Harrison Urban Garden will be incorporated into the Harrison School District 2's science curriculum (Kelley 2011).

PPUG has overall collaborated greatly with many different organizations throughout Colorado Springs, which has provided an array of benefits. However, this collaboration is relatively unstructured and occurs when an opportunity arises for other organizations to become involved. The involvement of the Harrison School District 2 developed because the garden was located right next to their administration building, and the support from the Westside Community Center also had to do with site location. The involvement of other organizations, such as Westside CARES, are site specific as well;

many of the collaborating organizations have generally teamed up with PPUG where they think they would benefit (Larry Stebbins, Personal Communication). While this collaboration and support has been successful, a more consistent structure and sense of collaboration could have the potential to increase resource availability.

There are also many organizations in Colorado Springs that PPUG could, but has yet to, collaborate with. Community gardens have proven to be a crucial component of the grassroots food movement, and many other initiatives in regards to local food are already happening within Colorado Springs. While there has been some collaboration and work between PPUG and other organizations, in general there is much room for better coordination among more of the local food and sustainability initiatives. Larry believes that there is some "reluctance of organizations being willing to work together...[when it comes to] the 'greenie' organizations, they want to run their own things." A specific example of this reluctance was during Local Foods Week this past year when the events of Local Foods Week didn't include any of PPUG's gardens or events. Larry firmly believes that if there were more communication and coordination, perhaps by including PPUG's work as part of Local Foods Week, rather than competing for the same resources, they could work together and "gain strength in numbers" as Lawson would say (2005: 243).

While Larry has been successful with his current collaborative efforts with churches, schools, and other philanthropy-based organizations, he sees much room for growth and opportunity when it comes to working with sustainability and local food focused organizations. "The future needs more cooperation," Larry noted, as he believes the main reasons inhibiting collaboration currently is that organizations tend to act very

independently. This can be overcome with better communication and consistency among all of the involved organizations, agencies, and initiatives. Increased collaboration will "help build broad-based constituency and provide long-term, consistent support of community gardening as a norm" (Twiss et al. 2003: 1437). If there is better coordination among all of these different organizations and initiatives, then community gardens could be promoted more, which may specifically lead to increased support for resources, or could generally help keep up community interest and get many other people behind the grassroots food movement in general.

Organization Within the Garden: PPUG's Management Structure

PPUG seems to be the go-to non-profit working with community gardens in Colorado Springs. With the exception of the Ranch Community Garden,³ all of the gardens created in the past five years have been started by PPUG. They have overall done a great job in working with the communities and acquiring the necessary resources. However, as the interest in gardening is growing, the amount of resources, staff, and time that PPUG has available can be an inhibitor for how many gardens are being created and maintained. Sarah believes that there is a lot of potential for more gardens, but this won't

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While PPUG is the go-to organization when it comes to community gardens in Colorado Springs, it is possible to start a garden without their help, as made evident by the Ranch Community Garden. Sander, the main creator of the garden, ultimately did not join up with PPUG because "he wanted to do it his way, he didn't want to follow the standard or the norm, so [the garden] had to be a separate entity." Lisa described it as challenging to go against the grain, especially because everyone would ask her "oh your part of PPUG," proving how when it comes to community gardens, PPUG really sets the standard for Colorado Springs.

The creation of the Ranch Community Garden is proof, however, that it is possible to start up a garden in Colorado Springs without support from PPUG. They found more creative mechanisms to acquire the resources that they needed for the start up, such as selling advertisements on the plots and gate for funding, and leasing land from the Beth-El Mennonite Church. Additionally, some creative solutions within the garden, such as setting up drip irrigation on a timer, helped organize the garden by reducing the amount of maintenance required.

be harnessed unless there are "more Larry Stebbins." She thinks that there is plenty of community interest and support for gardens in Colorado Springs, but it really takes someone with the time and money to do the start up work, which may mean more staff at PPUG. In regards to maintaining the garden, many of the gardeners see Larry as the go-to person to ask for help with certain issues or projects in the garden, but he is hard to reach. When everyone thinks of Larry as the go-to person for community gardens, it can lead to his own resources and expertise being spread too thin.

When PPUG's most knowledgeable resource, Larry, is spread too thin, a more consistent structure in regards to management and maintenance within the garden may help alleviate that issue. However, there is currently much ambiguity about how PPUG actually functions in regards to managing its gardens. Larry does not want to nor does he have the capacity to be identified as the go-to person when it comes to day-to-day questions in the garden; he would rather put his time towards creating new gardens while building the ability for his gardens to sustain themselves on their own. PPUG wants to make each garden independent of PPUG and managing itself within 3 years of the start up. Larry stated, "at the third year we fledge our gardens, they become independent of us...if they don't we take them over and use them to grow food for the less fortunate, but we haven't had that problem." PPUG does this by "waiting for a garden leader to emerge" and then working with that leader to create a management structure for the garden. According to Larry, once a leader is designated, during the next garden season PPUG will shadow that leader and "teach them how to be a good garden leader...what it takes for communication and organization." Then, the leader runs the garden on their own the 3rd year, with PPUG still supporting them. Starting the 4th year, the gardens are

on their own. When asked about the transition, Larry noted, "it's like watching a kid on a bike without the training wheels... they're off, and usually they do well."

While this leadership transition and structure seems to be clear and well organized, many of the gardeners have no idea that this 3-year transition is happening. Furthermore, many are not sure whom to approach when they have questions or issues in the garden when Larry can't be reached. At the Harrison Urban Garden, Joan seemed unaware of a specific garden leader, but she mentioned how she thinks a gardener, Dom, might fill that role. At that same garden, Jennifer wasn't aware of that at all: "I don't really know if its going to be a rotating thing or how its going to work," she noted about the management transition. Some gardeners might not even realize that PPUG is trying to transition the gardens to self-management or that Larry is waiting for a leader to emerge. Dana thinks the key is "letting people know that that's what they are waiting for...because I think people will hesitate to just kind of step forward into that leadership role...I think that would resolve a lot of issues." All of this ambiguity eventually results in most gardeners believing that Larry is the manager for all of their gardens. Dana recalled how the main way that the garden stays maintained is when Larry steps in once in a while as the "Gestapo" and gets everyone to clean up. Similarly, Dan thought that Larry and PPUG managed all of the gardens and that "all the rules are the same for all community gardens." While the instances that Larry steps in are helpful, this can relate to some other garden programs where "urban garden projects drew on external leadership during crises but found that leadership dissipated after each crisis was resolved" (Lawson 2005: 298).

In principle, it is a great goal of PPUG to have the gardens be self-managing so Larry and PPUG can spend more time creating new gardens rather than trying to resolve all of the issues in the current gardens. However, the ambiguity in this transition and the overall management structure has negatively impacted both the availability of resources for the gardens and the interest and enthusiasm of the gardens because of the lack of maintenance. If this transition were to have more of a consistent structure, and the gardeners were aware that this was happening, then it could help alleviate the issue of lack of resources, mainly the lack of Larry. A solid framework for garden leaders in conjunction with clear guidelines and support from PPUG can provide all of these benefits to the gardens, which will overall help promote longevity and success.

Discussion

Results Summary: What May Most Inhibit the Long-Term Success of Community Gardens?

The interviews conducted found that when it comes to establishing community gardens in Colorado Springs, there is a budding interest as well as resources available to meet the current needs of that interest. These findings are significant, as the theoretical analysis of gardens nation-wide consistently find that community interest is the first and most important step for establishing gardens. In terms of community interest in Colorado Springs, while there are a multitude of reasons for individuals and communities to be interested in joining and starting gardens, issues with lack of gardening knowledge and continual maintenance, garden politics, and outside factors have led to patterns of decreasing interest after the start up year, and many of these factors were in line with the

theoretical findings. When it comes to acquiring resources, initiatives and programs in place such as CDBG and the Parks Solution Team show a promising sense of support from the city of Colorado Springs, and these initiatives are relatable to many of the resources available in other cities as well. In regards to an organized structure to maintain and manage gardens, structure has mostly developed in the form of PPUG, which primarily acts as a middleman between the community and the municipal government to establish gardens. While PPUG's work is relatively new and has been successful, the interviews revealed that the current lack of rigor in their structure in both collaborating with other organizations as well as developing leadership within the gardens may be inhibiting the longevity and growth of community gardening in Colorado Springs. Other cities have found this to be a significant issue as well, where community garden programs "have been consistently enacted as expressions of local resiliency in times of crisis, but with a lack of rigor that undermines their permanence" (Lawson 2005: 301). While the future success of gardens, both in Colorado Springs and nation-wide, may be inhibited with business as usual, there are many specific ways to improve the structural issues found in order for community gardens to become self-sustaining entities, especially in regards to leadership development.

Making Gardens Self-Sustaining: The Significance of Leadership Development

As already discussed, there is currently much ambiguity in regards to who is managing each community garden in Colorado Springs. PPUG's goal of making gardens self-managing and sustaining within three years of creation stems from the factors of Larry Stebbins not having enough resources to manage all of the gardens, as well as the

more philosophical importance of having community gardens being run by the community. When compared to the work of Denver Urban Gardens, who manages over 100 gardens, Larry Stebbins applauded their successes while acknowledging that he does not have the time, resources, and capacity to function at their level. He believes that they have so many more gardens because "they have a budget about ten times the size of [PPUG]...what they do is they continue to manage many of their projects, so they hold onto many staff members to manage those scores of gardens." Larry Stebbins overall developed the three year goal in part by realizing that PPUG does not have the amount of staff or funding necessary to manage a large number of gardens. His goal also extends farther than PPUG not having the physical capacity to manages the gardens; he believes that it is important to develop self-managing gardens because "it brings in the community and teaches the community to learn ways to solve their own problems rather than relying on an organization." The importance of this has been found in many other cities as well, where it is important for the community aspect of community gardens to remain at the forefront. While assistance from garden organizations is crucial, the structure of that assistance is important to make sure that the community can have a sense of ownership over their garden, which is simple to do with a well thought out self-management plan (Lawson 2005).

Because of both physical capacity as well as community building philosophy,
PPUG's three-year self-management goal is ideal. However, the current ambiguity in this
leadership development and self-managing transition is not sustaining itself, and there are
many simple ways that this can be improved. By creating a consistent and solid
leadership development plan that can be used across the board in all of PPUG's gardens,

community gardens have the potential and capacity to become self-sustaining for the long-term. Leadership within the garden is crucial to both keep the garden maintained as well as bolster the interest and attitudes of the gardeners. Within almost any community garden, a similar situation plays out where "interest and involvement in anything other than actual gardening or socializing gradually slacken, and much of the maintenance and organization work becomes the responsibility of one or more core persons" (Schmelzkopf 1995: 377). This scenario can lead to negative issues of resentment or tension about who is contributing to the garden and who is not, or it can be used to benefit the garden by harnessing the power of the people most involved. However, garden leaders should not be solely responsible to maintaining the entire garden. What they can do is ensure that the garden is maintained by holding the other gardeners accountable to set expectations in the garden.

Leadership within the garden is also important by promoting "mechanisms for getting tasks done, communicating effectively, and promoting membership and belonging" (Teig et al. 2009: 1120). Whereas a leader is important to ensure that the garden is maintained, the definition and quality of that leadership role can additionally foster a positive environment that has the potential to keep the gardeners engaged and interested in belonging to the garden. It may be necessary for garden leaders to hold periodic workdays to keep up with the maintenance of the garden, but additional tasks in their leadership description may want to include hosting events to keep all of the gardeners actively engaged. For example, one study found that events like potlucks and workshops strengthened community bonds in the garden (Simson and Straus 1997). For both leaders and gardeners, their experiences became enhanced through these events as

well as experiential learning in the garden (Twiss et al. 2003). PPUG already has this understanding of why garden leadership is significant; some gardens have already hosted potlucks and workshops, and PPUG provides many of its own larger gardening classes. However, a lot of these efforts are inconsistent and leadership roles are currently established ambiguously. There are, however, some changes in the structure of leadership development and management transitioning that could be of benefit to both PPUG and its gardens.

Recommendations for Improving Leadership Development

From both analyzing literature as well as specific gardens within Colorado

Springs, this study finds that there are two main ways that leadership structure within

community gardens could be improved. The first involves acquiring more resources for

garden organizations to support their garden leaders and ensure that the leaders are living

up to their expectations. However, as will be discussed, with funding and staff

availability constraints, this might not always be an option. Second, this study proposes

that developing a group of leaders within each garden can address this issue of limited

resources as well as other leadership factors that can vary from garden to garden. As will

be discussed more in detail, the benefits of developing a group of leaders is supported by

existing literature on successful leadership models, and will be consistent with the

existing structures of gardens.

A first option to improving the current leadership development structure is to acquire more staff and resources within PPUG that can be used to support garden leaders. In the current structure, after waiting for a garden leader to emerge, PPUG shadows the

leader the second year while teaching them how to be a good garden leader, which to Larry is good "communication and organization." Then, in the third year, the leader runs the garden with PPUG standing behind them, and ultimately, in the fourth year, the leaders are on their own. P-Patch in Seattle has a similar leadership development structure where the staff helps the leaders by coming up with strategies to solve problems within the garden while also providing physical resources for the leaders (Cobb 2011). This timeline and structure is great in theory, but has not been consistently played out as made evident by the current confusion about leadership expressed by the gardeners. Also, nine of the twelve PPUG gardens in Colorado Springs are still in the transitional period and are ultimately still managed by PPUG. PPUG does not necessarily have the staff to support this current structure. It might not be realistic to foresee PPUG acquiring more resources and staff in the near future.

While P-Patch does have more staff to support their structure, through their growth they faced a similar scenario where they were resource limited. According to their history, "as the number of gardens increased and staff stayed relatively flat, P-Patches were forced to take on more responsibility...[they] began to develop teams of leaders to handle the many tasks going into running a P-Patch" (P-Patch Community Gardening Program, unpaginated website, n.d.). Developing a group of leaders within each garden is a more promising suggestion for improving the current management structure of the gardens, and in P-Patch's case, it really worked. Developing a collaborative group of leaders, rather than one leader, can help ensure that there are enough resources to go around while also making sure that the structure is accommodating to multiple desires of the gardeners.

In a focus group, Dan, Laura, and Dana all discussed their ideal leadership scenario for the Westside Community Garden. They unanimously agreed that a board of leaders, three leaders in particular, would benefit the entire garden. First, Laura suggested a board out of concerns that a single leader could be someone whose interests and leadership style would not cater to everyone's likes. She expressed a fear that issues would arise if a particular gardener stepped up as the leader because "he likes to tell people what to do and that would totally ruin it." This also relates to how different personalities may want different levels of structure for their gardens, from gardeners who may like the stringent rules similar to the Bear Creek Garden, to others who think that strictness impedes on their original reasons for gardening. A group of leaders, rather than one leader, is more likely to be accommodating and understanding of different organizational desires of the gardeners. Second, Dana saw a board of leaders as being beneficial to having consistent and committed leadership, in case one person was out of town or on vacation. It is also important to not put too much responsibility on one person, especially when gardening is a hobby that most gardeners have in addition to their professional lives. Dan agreed that a group of leaders could take a lot of that pressure off of one person. In addition, he believes that a board of leaders is essential to bring together a wide variety of resources and perspectives, for example, "one that has communication skills, one that has technical competence, etc." This leadership structure remains in line with past studies as well, especially in gardens in Denver where they found that a group of leaders worked well because "everybody's strengths are balanced" (Teig et al. 2009: 1120). All of these reasons contribute to the benefits that having a board of leaders could provide. Dan, Laura, and Dana agreed as well that PPUG should help develop the

structure for the board by setting the parameters of their leadership expectations and limitations, similarly to how P-Patch works closely with its garden leaders. Having a group of leaders rather than one leader may make it easier for PPUG to provide assistance, because there are now more hands available to help, which is what P-Patch found as well. In general, creating a structure to develop a group of leaders within each garden is both realistic and can help create a consistent sense of organization without extending PPUG's resources too far.

General Conclusion and Future Research

Community gardening in Colorado Springs has come a long way in the past few years, but there is still much room for improvement. Community interest and resource pools are present and growing, but there is a lack of thoroughness in the structure of PPUG that is inhibiting the future success and growth of gardens. The most fundamental issue that has been found is an ambiguous leadership structure to make each garden self-managing. Leadership structure can generally take many forms within the garden, but creating a board of leaders may seem like the most reasonable way to address many issues that may arise in the gardens in Colorado Springs. Developing a group of leaders addresses both accommodating different gardener desires for leadership qualities while also keeping in mind the limited resources that PPUG has to support those leaders. While there were limitations in this research, especially from the small sample size of interviewees, this recommendation can be applied to any garden situation, and has been found to be successful, especially in Seattle and Denver. Ultimately, developing a group of leaders will provide more benefits than harm by helping to use resources more wisely

and not putting too much pressure on one garden leader, while accommodating to a multitude of different gardeners. The reward of seeing a thriving, well-organized, and self-sustaining garden "compensates for the hard work of planning and organizing the garden" (Lawson 2005: 302). A solid sense of organized structure for community gardens is crucial to address the factors of community interest and resource acquisition, and a more consistent leadership structure will inevitably contribute to the success and longevity of the gardens.

Additionally, an improved leadership structure will create more of an opportunity for PPUG to put its efforts towards creating even more successful gardens. Once more structure is developed within the gardens, and the gardens in Colorado Springs become self-managing and more self-sustaining for the long-term, PPUG can then focus more on starting more gardens throughout the city. Future research could examine how much potential there is for more gardens within Colorado Springs in terms of resource availability and community interest. While the present gardens have been of benefit, there could be much room for growth, if the community wants it.

This future research could additionally address the role of community gardens in the broader grassroots food movement in Colorado Springs. With many other local food initiatives concurrently arising in Colorado Springs, it is important to determine how community gardens fit in, in regards to harnessing more community interest and support for a larger gardening program. Community gardens may in fact be "the first gateway for creating a local food system…they are often an important stepping-stone leading to broader community food action" (Cobb 2011: 40). There have been many local environmental activists pushing for the creation of more gardens, numerous local schools

wanting to develop garden programs, and more institutions and initiatives expressing interest in supporting gardens, all within relation to developing a local food system. This potential can be assessed with additional research both within the city of Colorado Springs and in light of the more general nation-wide grassroots food movement.

Regardless of what the exact potential for future garden growth is in Colorado Springs, addressing and working on the current gaps in organized structure for the gardens in Colorado Springs, especially in regards to leadership development, is critical to focus on in the present. The findings in this study can additionally be used to improve gardens nationwide, as the suggested improvements can be relatable to most community garden programs. Community interest, resource support, and an organized structure are all essential to establish community gardens. But for Colorado Springs as well as other cities, improving the current organized structure will be the key to set gardens up for success, so the gardens can provide the far-reaching benefits that they are known for.

References

"About the P-Patch Program." *P-Patch Community Gardening Program*. Department of Neighborhoods, n.d. Web.

Armar-Klemesu, Margaret. "Urban agriculture and food security, nutrition and health." *Bakker et al* (2000), pp99–118 (2000).

Cobb, Tanya Denckla. *Reclaiming Our Food: How the Grassroots Food Movement Is Changing the Way We Eat.* Storey Publishing, 2011.

Crossney, Kristen B., and Emily Shellenberger. "Urban Food Access and the Potential of Community Gardens." *Middle States Geographer* 44 (2012): 74-81. Web.

Francis, Mark. "Some different meanings attached to a city park and community gardens." *Landscape Journal* 6.2 (1987): 101-112.

Glover, Troy D. "Social capital in the lived experiences of community gardeners." *Leisure Sciences* 26.2 (2004): 143-162.

Hall, Diana. "Community Gardens as an Urban Planning Issue." Thesis. Simon Frasier University, 1989. Print.

Hamilton, Neil D. "Greening our garden: public policies to support the new agriculture." *Drake J. Agric. L.* 2 (1997): 357.

Henderson, Bethany Rubin, and Kimberly Hartsfield. "Is getting into the community garden business a good way to engage citizens in local government?." *National Civic Review* 98.4 (2010): 12-17.

Jamison, Michael S. "The joys of gardening: Collectivist and bureaucratic cultures in conflict." *The Sociological Quarterly* 26.4 (1985): 473-490.

Kelley, Debbie. "Community Gardens Sprouting All over the Springs." *The Gazette* [Colorado Springs] 13 May 2011: n. pag. Web.

Lawson, Laura. "The Planner in the Garden: A Historical View into the Relationship between Planning and Community Gardens." *Journal of Planning History* 3.2 (2004): 151-76. Sage Publications. Web.

Lawson, Laura J. City bountiful. University of California Press, 2005.

Pothukuchi, Kameshwari, and Jerome L. Kaufman. "Placing the Food System on the Urban Agenda: The Role of Municipal Institutions in Food Systems Planning."

Agriculture and Human Values 16 (1999): 213-24. Kluwer Academic Publishers, 18 July 1998. Web.

Schmelzkopf, Karen. "Urban community gardens as contested space." *Geographical Review* (1995): 364-381.

Schukoske, Jane E. "Community development through gardening: state and local policies transforming urban open space." *NYUJ Legis. & Pub. Pol'y* 3 (1999): 351.

Simson, Sharon, and Martha Straus. *Horticulture as therapy: Principles and practice*. CRC, 1997.

Smith, Christopher M., and Hilda E. Kurtz. "Community Gardens and the Politics of Scale in New York City." *The Geographical Review* 93.2 (2003): 193-212. Web.

Teig, Ellen, Joy Amulya, Lisa Bardwell, Michael Buchenau, Julie A. Marshall, and Jill S. Litt. "Collective Efficacy in Denver, Colorado: Strengthening Neighborhoods and Health through Community Gardens." *Health & Place* 15 (2009): 1115-122. *ScienceDirect*. Web.

Thompson, Susan, Linda Corkery, and Bruce Judd. "The role of community gardens in sustaining healthy communities." *Paper to be presented at the Third State of Australian Cities Conference, Adelaide*. 2007.

Twiss, Joan, Joy Dickinson, Shirley Duma, Tanya Kleinman, Heather Paulsen, and Liz Rilveria. *Community Gardens: Lessons Learned From California Healthy Cities and Communities*. Rep. American Journal of Public Health, Sept. 2003. Web.

Vogrin, Bill. "Bitter Harvest from Community Garden." Editorial. *Side Streets: Neighborhoods, People and Issues.* The Gazette, 18 May 2008. Web.

Vogrin, Bill. "Side Streets: Help Plant the Seeds of Community by Volunteering in Mill Street." *The Gazette* [Colorado Springs] 14 Nov. 2012: n. pag. Web.

Vogrin, Bill. "Side Streets: Mill Street Survived Double-whammy, Ready to Garden." *The Gazette* [Colorado Springs] 18 Apr. 2012: n. pag. Web.

Voicu, Ioan, and Vicki Been. "The effect of community gardens on neighboring property values." *Real Estate Economics* 36.2 (2008): 241-283.

Voigt, Kate A. "Pigs in the Backyard or the Barnyard: Removing Zoning Impediments to Urban Agriculture." *BC Envtl. Aff. L. Rev.* 38 (2011): 537.