

GROWING ECOLOGICAL CITIZENSHIP: MOTIVATIONS AND PRACTICES OF HOME
GARDENERS IN ATHENS, GA

by

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(Under the Direction of Julie Velasquez Runk)

ABSTRACT

Growing food at home is a popular way for individuals to spend time outside and eat fresh produce. This study asks whether food gardens are connected with larger issues such as access to food and an environmental consciousness represented by ecological citizenship. Ecological Citizenship is a new theory in green political thought that focuses on practices. Through locating and mapping gardens in six census block groups as well as semi-structured interviews with gardeners in Athens, GA this study examines the presence and motivation for growing food at home. This study finds that growing food at home is motivated by concerns for the environment and desire for alternatives to the conventional food system. Growing food at home is significant and empowering for its many practitioners.

INDEX WORDS: ecological citizenship, practice theory, food desert, urban agriculture, and gardening

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CHAPTER 1

INTRODUCTION – THE GROWTH OF GARDENS

Every spring when I return to my parent's suburban Atlanta household, a list of garden tasks awaits me. My mother and I pull out the old, tangled black netting and do our best to stretch it over the blueberry bushes. I grab a shovel and turn the black compost pile filled with egg shells, banana peels and slinking earthworms. I haul out a thick roll of metal wire from the cobwebbed crawlspace, and along with pliers and wire cutters I fashion as many homemade tomato cages as I can before the cutting and bending of the metal makes my hands hurt. These are practices long nurtured in my family; spring and summer afternoons are spent outside tending to an ever growing garden of fruits, vegetables and herbs. I have brought these practices and passions with me wherever my travels and studies have taken me, starting with small plots of carrots to tomatoes grown in buckets, to larger enterprises like the 150 square foot fall garden I dug for last fall's vegetables.

My enjoyment of gardening has grown as I learned more about plants, local ecologies and food. For me gardening is more than a hobby, but a meaningful way to interact with my local landscape and the world around me. I am more aware of the seasons, the soil beneath my feet, and the food that I make and eat. Living in Athens, I often see houses that have turned their yards into marvelous food gardens. I appreciate these gardens and the character and diversity they add to neighborhoods. There is something powerful and magical about turning a weedy corner of a yard into something planned, ordered and productive. Fresh tomatoes taste sweeter and juicier

than anything found in the grocery store, and make all of the digging, tilling and watering worth the effort.

But agriculture in urban and suburban households is more than romantic notions of magic seeds; it is a significant and meaningful activity for its many practitioners. Tied within these practices are complex motivations about the state of our modern food system, the role of commercially produced food in our everyday lives, and notions of sustainability, stewardship and empowerment.

The persistence of growing food in urban areas of the United States exists in a time when there have never been more options for buying groceries. Standard grocery stores are complimented by large wholesale stores, organic and natural groceries, farmers markets, ethnic vendors, and discount retailers like Walmart that offer fresh produce. This huge variety of food buying options includes an assortment of fruits and vegetables for the consumer. The modern grocery is a place of variety, where fruits and vegetables shipped around the world are available without seasons (Pollan 2007). Yet within this maze of grocery store aisles and farmers market stalls many people find their way out and into their back yards, where the practice of growing food yourself remains an enduring and thriving endeavor.

The rise of specialty natural and organic grocery stores as well as the growth of farmers markets in the United States is the result of and backlash to changes that have overtaken the American food landscape. The number of farms in the United States decreased from 7 million in 1935 to around 1.7 million in 1997, yet during that period farms over 500 acres dramatically increased from 4% to 18%. (USDA Agriculture Fact Book: 25). As farms got bigger the use of chemical pesticides, herbicides and most recently Genetically Modified Organisms (GMOs) has

also grown systematically (Fishel 2011, Global Status of Commercialized Biotech/GM Crops 2011). Large corporate farms that rely on monoculture, mechanization, and chemical inputs dominate the landscape of modern American agriculture. These farming trends were mirrored by trends in the supermarket; food became processed, packaged, and altered for the consuming public (Vileisis 2008).

As the environmental and health effects of these dramatic changes in America's food landscape took hold, an alternative movement of consumers emerged against commercial food and agricultural hegemony. Influential authors such as Michael Pollan, Barbara Kingsolver and Wendell Berry began informing a receptive public of the dangers within our food system. Increased awareness in the production and consumption in food has driven changes in the marketplace, specifically in alternatives to traditional grocery stores. These alternatives include organic agriculture, local farmers markets, community supported agriculture and local neighborhood community gardens. Organic food and beverage sales grew from \$1 billion in 1990 to \$26.7 billion in 2010 (Organic Trade Association). The number of farmer's markets has grown from 1,755 in 1994 to 7,864 in 2012 (USDA: Farmer's Markets and Local Food Marketing). There are an estimated 18,000 community gardens currently in the United States and Canada (American Community Garden Association). The growth of organic food and farmer's markets mirrors other food movements and alternatives including Slow food, veganism and vegetarianism, and any number of diets encouraging the consumption of raw foods, or protein based foods, or only foods that a paleolithic person would eat. Awareness and concern of the commercial agriculture and food system is driving consumers to seek alternatives that are healthier, more local, and better for the environment.

In addition to dramatic growth in organic produce, farmer's markets, and community gardens, home food gardening also has seen significant growth in recent years. Reported estimates of households that grow food rose 19% from 36 million to 43 million between the years of 2008 and 2009 alone. This represents a total of 37% of the households within the United States that grew some of their food in 2009 (National Gardening Association 2009). Gardening is a \$2.5 billion dollar a year industry in the United States, with a \$530 average food-gardening return on investment per household (National Gardening Association 2009). While the growth in gardening matches growth in other alternative food options, growing food in the household stands apart. Growing food at the household level involves a complex mixture of motivation, knowledge, and practices (labor) that differentiate it from patterns of consumption.

Concerns about how food is produced and its effects on the environment and human health are deeply rooted in environmental movements. Since the publication of *Silent Spring* (Carson 1962) the pollution and widespread dangers of increased pesticide and herbicide use in commercial agriculture have aroused suspicion of the value of chemical agriculture. Concerns about the effects of pesticides on food safety and water quality increased dramatically during the 1980s and 1990s, receiving increased attention by conscientious consumers and interest groups (Sachs 1993). More recently the local food movement has combined environmentalism with food systems as a “collaborative effort to build more locally based, self-reliant food economies – one in which sustainable food production, processing, distribution, and consumption is integrated to enhance the economic, environmental and social health of a particular place” (Feenstra 2002: 100). Environmental concern and ethics are defining new relationships between food producers and consumers, enabling new lines of inquiry into the motivations of home food producers.

Environmental and ecological ethics are guiding new trends and alternatives that highlight a new sort of citizenship in modern America. While citizenship is traditionally defined through a relationship between individuals and the state, these new green behaviors hint at a new form of ecological citizenship. As informed individuals embrace their role as ecological citizens, their actions and behaviors come with new motivations and goals. The behaviors motivated by ecological citizenship encourage new practices and communities that form around these common practices as well as shared goals, motivations, and virtues. The development of new practices as forms of ecological citizenship occurs in both public and private arenas, and is significant and meaningful for participants.

Athens-Clarke County provides an ideal site for examining the practices of food gardening and their connection with ecological ethics. Athens is home to a wide variety of food buying options, including Kroger, Publix, Aldi, Walmart and Piggly Wiggly to satisfy the needs of shoppers in search of produce. Niche groceries have sprung up, including health food groceries such as Trader Joe's, Earth Fare and The Daily Co-Op, as well as the options available at the bi-weekly farmers market, local Community Supported Agriculture (CSA) and the online portal to fresh food of Athens Locally Grown. Athens is home to many alternative food movement and environmental organizations as well as a diverse array of farmers markets and community gardens. Growing food at home is a common practice in Athens, where the climate offers both advantages and challenges to gardeners. Summer heat and drought is often a challenge for those who grow food, but warm and wet spring and fall seasons allow for much longer growing seasons. For these reasons home food growers in Athens-Clarke County are the focus of this research project and the following research questions.

In this research I seek to understand whether and how decisions to create food gardens and edible landscapes are motivated by ecological citizenship in Athens-Clarke County. This serves as the framework for asking the following research questions:

- Are decisions to create food gardens and edible landscapes informed by motivations of ecological citizenship?
- What are socio-economic and spatial patterns of households who choose to engage in food production?
- How are households that landscape with edible plants motivated by aesthetic, ethical, economic, cultural, ecological, and other goals?
- How do gardeners understand their gardening practices as part of developing and expressing ecological citizenship?

RESEARCH SITE

Athens is a college town located in Clarke County in the northeast of Georgia (Figure 1-1), with a population in 2010 of 116,714 (US Census 2010). Clarke County has much higher population than the surrounding counties of Jackson (60,485), Oconee (32,808), Madison (28,120), and Oglethorpe (14,899) (US Census 2010). Athens is focused around The University of Georgia, the oldest and largest university in the state. Historically Athens was located in a region of agriculture, and The University of Georgia focused on agricultural education and outreach for much of its history. The University and surrounding town have grown significantly, and become a center of higher education and culture. Athens is known for its music scene which has produced nationally popular bands, its culture that is centered around college football and its

culture of bars and drinking – UGA was ranked the top party school in the nation in 2011 (Princeton Review 2011).

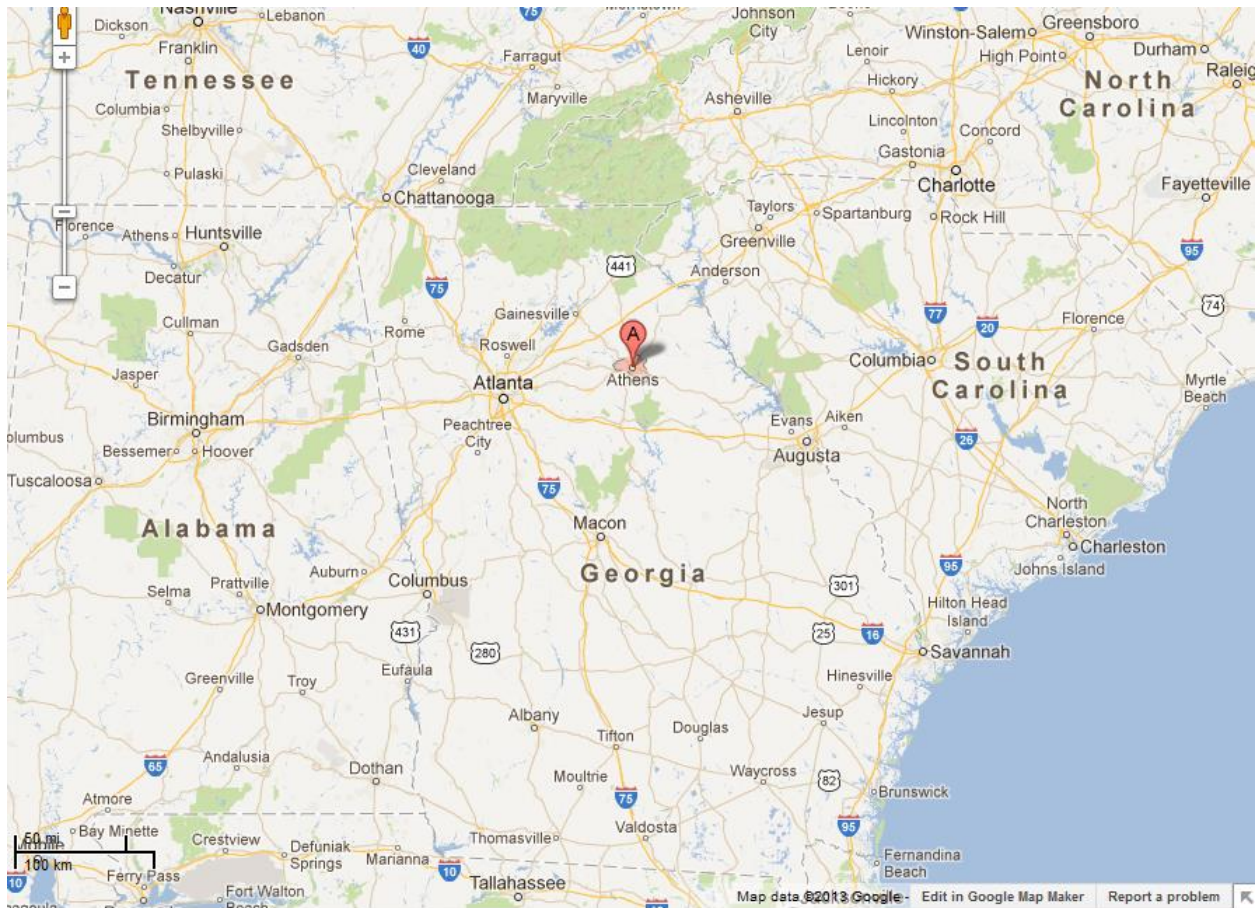


Figure 1-1: Map Indicating the Location of Athens, GA (Google Maps)

In many ways Athens conforms to the description of American college towns as described by Blake Gumprecht (1993). According to Gumprecht American college towns share a number of characteristics: these towns are youthful places, populations are highly educated, residents are less likely to work in factories and more likely to work in education, family incomes are high and unemployment is low, they are transient places, residents are more likely to rent and live in group housing, these towns are unconventional places and they are comparatively cosmopolitan (Gumprecht 1993: 54-55). Many of these trends describe Athens. In 2007 the

median age of residents in Athens was 24.7 in comparison to a state average of 34.7, Athens-Clarke County residents are more likely than average Georgia residents to have a bachelor's degree (20.9 % to 16.0 %) and more than twice as likely to have a graduate or professional degree (18.9% to 8.3%) (US Census 2010). 29% of the residents of Athens are students at the University, and 58 % of households in Athens are rented instead of owned (US Census 2010).

Athens also follows many of the ideological and cultural features of college towns as noted by Gumprecht. Gumprecht notes that “with their abundant young people and traditionally left-leaning faculty, many college towns have become bastions of liberal politics” as well as the fact that college towns “are home to unusually high concentrations of people who listen to National Public Radio, vote Green, or belong to a food co-op” (Gumprecht 1993: 55, 66). Athens is far more liberal, intellectual and cosmopolitan than similar sized Southeastern cities without a large University, boasting many bookstores, bike shops, vegetarian, international and high class restaurants, record stores, a regional brewery, and health food groceries and several farmers markets. Athens-Clarke County typically stands out as voting Democrat amidst a sea of Republican Georgia voters, for example voting 65% for Barack Obama over Mitt Romney's 34% in the November 2012 National Election (Statement of Votes Cast: Clarke County 2012).

In other ways Athens-Clarke County stands in contrast to the average college town. While Gumprecht describes that “in college towns, family incomes are high and unemployment is low” (Gumprecht 1993: 54), Athens is characterized by great ethnic diversity and many low-income residents. Both the median household income and per capita income for residents of Athens-Clarke County are significantly lower than state averages (\$32, 727/ \$47,469 and \$25,632/\$34,849 respectively) (2011 Georgia County Guide). In comparison, neighboring Oconee County has a median household income of \$74,630 and has seen a large population

increase as wealthy white families move out of Athens to send their children to schools in Oconee County (US Census 2010, Athens Banner Herald 2010). Athens also has twice as many residents that are below the poverty level than the state average (36.3% vs. 16.6%). The vast majority of these low income residents belong to minority ethnic groups, specifically Black (19.3%) and Latino (8.0%) groups (Diversity Data: Athens-Clarke County). Members of these minority groups are likely to be less educated, unemployed, and live below the poverty line (Diversity Data: Athens-Clarke County). The reasons and causation for the high poverty rate of minorities in Athens-Clarke County is complex and beyond the scope of this paper, but this remains a glaring fact of life in Athens. This often leads to the impression that Athens is a fairly typical college town with patches of low income black communities, and fringed by a growing population of low income Latino communities.

Local Food Culture in Athens

Athens also stands out as progressive in relation to food policies and alternatives to traditional food growers, marketers, and sellers. Athens offers a large selection of traditional grocery stores as well as alternatives including Trader Joe's, The Daily Co-op and Earth Fare. The Athens Farmer's Market reopened in the Spring of 2008 after a long hiatus. The farmer's market has been successful in its goal of providing fresh produce, as well as championing ideas of community and sustainability (Passidomo 2009). The market continues to grow, and the success of the farmers, vendors, and happy customers demonstrates that Athens has a willing population of people interested in organic locally grown food. Besides the farmer's market Athens has a number of other opportunities for individuals interested in food alternatives. Many of the local farms around Athens, including those that participate in the farmer's market, offer opportunities for consumers to join a Community Supported Agriculture (CSA), whereby

consumer pay upfront for a weekly supply of a farmer's harvest. This is accompanied by the online market called Athens Locally Grown (<http://athens.locallygrown.net/>). Athens Locally Grown is an online market where local farms list their available vegetables, herbs, mill products, dairy, eggs, meats, fruits flowers and transplants. Athens Locally Grown describes their goals to: enhance the local economy, save natural resources, provide learning opportunities, and supporting a way of life (<http://athens.locallygrown.net/>). A number of restaurants such as Farm 255 and Heirloom Café and Fresh Market sell locally grown food. The wealth of food opportunities in Athens is indicative of its character as a college town; informed citizens have grown concerned about the health, environmental, and economic impacts of the traditional food chain, and are actively seeking and supporting alternatives that offer organic and local options.

Along with the variety of food selling options in Athens there are a number of organizations and associations devoted to food politics. PLACE: Promoting Local Agriculture and Cultural Experience is a local organization with a mission of promoting a strong and accessible food culture in Athens, GA (<http://www.localplace.org/>). PLACE was instrumental in helping to establish the Athens Farmer's Market by responding to the needs of consumers, restaurants and chefs, and teachers. The Athens Food Policy Council is an organization "that serves the residents of Athens-Clarke County by becoming experts on food issues and promoting policies that increase the health and well-being of the county's citizens and the region's food system" (Common Ground Athens). The Athens Urban Food Collective is a collaboration between students and professors of the UGA Geography Department and local community members to work of food alternatives that address food insecurity in Athens-Clarke County. Athens has a chapter of the Slow Food Movement, devoted to good, clean and fair food (Athens Slow Food). There is also a Tour de Farms in Athens, where interested community members can

go on a three day bicycle tour of local food producing farms. The University of Georgia also has numerous campus groups devoted to food alternatives, including Campus Kitchen as well as certificate programs in both organic and local agriculture. The number and involvement of these different organizations highlight the importance of alternative food awareness to those that think the current mainstream food system is detrimental to the health of local communities and the environment. For many individuals in Athens growing food at home compliments their involvement in alternative food projects.

RESEARCH METHODS

The research methods employed in this project were designed to measure whether and how decisions to create food gardens and edible landscapes are motivated by ecological citizenship. This serves as the framework for asking the following research questions: Are decisions to create food gardens and edible landscapes informed by the motivations of ecological citizenship?

- What are socio-economic and spatial patterns of households who choose to engage in food production?
- How are households that landscape with edible plants motivated by aesthetic, ethical, economic, cultural, ecological, and other goals?
- How do gardeners understand their gardening practices as part of developing and expressing ecological citizenship?

All research for this project was approved by the University of Georgia Institutional Review Board (IRB) on human subjects research (project number: 2012-10833-0). In order to operationalize these research questions I chose methods that allowed me to access attributes of neighborhoods, communities, and individuals. I used U.S. Census data to collect socio-economic

attributes of different neighborhoods in Athens, which allowed me to select six diverse census block groups to focus my study. After selecting six census block groups I canvassed these neighborhoods looking for gardens. This strategy allowed me to collect spatial data on the presence of gardens in neighborhoods with different socio-economic attributes. I chose a random sample from gardens located, and interviewed gardeners to collect data on the individual motivations and understandings of home food gardens.

Research Method: Census Block Group Selection and Canvassing

I used United States Census data to select six diverse block groups for this project including the two lowest median income block groups, the two highest median income block groups and two block groups with mid-range median incomes.¹ Census block groups are a convenient way to look at small neighborhoods within Athens that are relatively homogenous. For this project I used demographic data to select six census block groups in Athens-Clarke County which have diverse socio-economic attributes. Figure: 1-2 is a map of Clarke County showing median income for all block groups of Clarke County, as well as the six block groups surveyed in this project. Table:1-1 summarizes the attributes of the selected and surveyed block groups in Clarke County.

To accomplish this I downloaded demographic data from an Environmental Systems Research Institute (ESRI) website which hosts U.S. Census data in the form of TIGER/line data. Topologically Integrated Geographic Encoding and Referencing (TIGER/line) data is a format used by the United States Census Bureau to describe Census data in a format that can be incorporated into Geographic Information Systems (GIS). I downloaded demographic data for

¹ The census block group is a unit of geographical space used by the U.S. Census Bureau that is between the broad scale census tract and the small scale census block. Census block groups are the smallest geographical unit for which the Bureau publishes sample data.

Clarke County from the year 2010 Census

(http://arcdata.esri.com/data/tiger2000/tiger_download.cfm). Because socio-economic variables are of interest in this project, I chose median household income as the feature from which to select these block groups. Income data is not available in the census TIGER/Line data, so I collected the data from the American Community Survey 5-year estimates from 2007-2011 and converted it into a format in which the data could be joined to the TIGER/Line data in ArcMap (http://www.census.gov/acs/www/data_documentation/summary_file/)

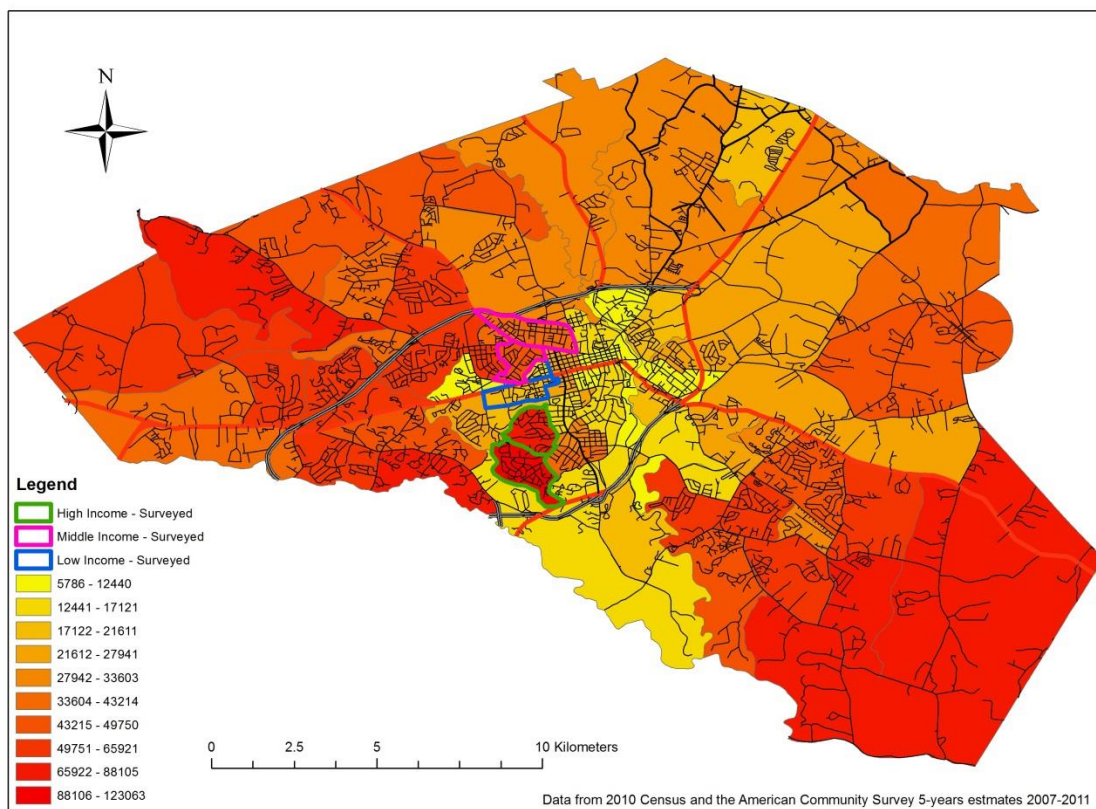


Figure 1-2: Athens Clarke County: Block Groups by Median Income and Six Block Groups Surveyed

Table 1-1: Attributes of selected and surveyed Block Groups

Block Group	Median Income	Population	Households	%Owner Occupied
High Income - 1	\$ 123,036	850	349	89%
High Income - 2	\$ 79,792	1045	431	74%
Middle Income – 1	\$ 47,813	1117	573	52%
Middle Income – 2	\$ 37,817	1577	724	36%
Low Income - 1	\$ 20,988	1569	440	40%
Low Income - 2	\$ 16,084	834	379	24%

During June 2012 I walked and rode my bicycle over every street within the six census block groups I had chosen to investigate in this project. The goal was to identify every household that engaged in food production or edible landscaping. This method of finding households under represents households that have food gardens. The food gardens most obvious during canvassing were gardens in the front and side yards of houses. The back yard is often the preferred location for many people who choose to grow food at their houses, but unfortunately, many of these back yard gardens cannot be seen from the street. As this process was intended to be as little invasive as possible, many people who grow food in their back yards were not noticed, and therefore were invisible as far as this project is concerned. The only way to get a truly accurate picture would be to knock on the door of every household and ask if they grow food; this would have been much too time consuming and invasive for this project.

Whenever I found a household that grew food I recorded a GPS point of the location and the address of the house. The goal of this exercise was twofold: The GPS points would allow me

to plot the location of all food growing households and relate this information to other spatial factor in food decisions such as the location of food deserts and groceries, as well as to form a sampling frame for performing interviews of food growers. Using this method I identified a total of 138 food growing households.

Research Method: Interviews

From the total of 138 households identified I selected a stratified random sample to participate in interviews. I randomly selected one quarter (25%) of households in the high and middle median income block groups, and half (50%) of the households in the low median income block groups. This was done to ensure that a roughly the same number of interviews were performed in each of the block groups, because the low median income block groups had far fewer households that grew food (see Chapter 4 for results and analysis). I assigned each household a unique identifier, and then selected households using an online random number generator (www.random.org).

For each house selected in the sample, I knocked on their door and I asked if I could talk to them about their gardens. I explained the project to them, and asked if they wished to participate. If no one could be reached at a household an alternate was randomly selected. Once I explained the project to the individual at the household responsible for the food garden, almost all agreed to participate and were very enthusiastic. Most residents are very proud of their food gardens and eager to discuss them.

The interviews used in this project were designed to measure both motivations for growing food and practices involved (see Appendix A for interview). A mixture of qualitative and quantitative data was collected during these interviews. A Likert-type scale was used to scale the importance of various motivations for growing food at one's household (Bernard 2006: 327).

Respondents were asked to quantify how important different reasons were in their decision to grow food at home on a scale from not important, a little important, somewhat important, important or very important. When an informant listed a reason as important or very important they were asked to elaborate on this reason and why it was so important in their decision to grow food. Then, respondents were asked to name reasons important to them that were not listed on the interview sheet. Next, a number of semi-structured interview questions were asked about the practices of each home gardener both within their households and communities of friends, family, neighbors and community gardens in Athens. The context of the interview was very informal and open ended, allowing the respondent to discuss issues relevant and important to them. For this reason interview length varied from 4 minutes to over an hour in the case of talkative and passionate gardeners. I carried out a total of 44 interviews.

OUTLINE OF CHAPTERS

The chapters of this thesis are arranged to discuss the relevant literature followed by the results of the research. In Chapter 2 I will discuss the origin and development of environmental ethics within literature that seeks to understand modern citizenship. This will cover the development of ecological citizenship as well as other variants including environmental citizenship, cosmopolitan citizenship, and sustainability citizenship. In this chapter I will also discuss the importance of practices – how motivations and goals inspired by ecological citizenship are reflected through behaviors. This covers communities of practice, where groups participate in collective learning and behaviors within a shared domain, as well as practice theory which builds a relationship between everyday action in the private sphere and the large ethical goals and motivations of ecological citizenship.

In Chapter 3 I will look at the geographical aspects of growing food as well as access to food sources in Athens, Georgia. This chapter covers the importance of socio-economics within the geographic setting of Athens, and discusses the role of food deserts in access to fresh food. Geographical results of food growing, as well as community gardening and access to fresh food in Athens will be presented. In Chapter 4 I address the motivations of home food production and place these motivations within a framework of ecological citizenship by present results from interviews with Athens food growers. In Chapter 5 I summarize the findings and place home gardening practices within a larger context of home and food landscapes.

CHAPTER 2

ECOLOGICAL CITIZENSHIP: FROM GREEN TO GROWING FOOD

INTRODUCTION

The growth of local farmer's markets, organic food, alternative grocery stores and community gardens both nationally and in Athens demonstrates a continued commitment to alternative food systems. The manifestation of this commitment is rooted in many desires. People participate in these alternatives for many reasons: they are concerned about the health of the food they put into their bodies and impact of widespread pesticide use in conventional agriculture, they wish to combat some of the biggest health problems in America such as heart disease, diabetes and obesity, and they would like to see their local economies and local farmers succeed and thrive. But central to many of the concerns of participants in alternative food culture are environmental concerns. This environmentalism is complex and multifaceted: including ideas of food miles, sustainability, and health for people, the land, and future generations.

Growing food at home is the most personal expression of a commitment to alternative food. No longer is participation confined to (ethical, local or sustainable) consumption. Growing food at home requires a considerable amount of time, effort, knowledge and usually some form of monetary commitment to turn a piece of land into a functioning garden. Sweat and muscle power is expended in digging into the ground, and weeding out the unwanted volunteers. Knowledge is gained and shared into how to combat aphids and deer that dine on your crops. Water, seeds, soil, and building supplies can cost a not insubstantial amount of money. And

gardening is often a labor of love, especially here in Athens where drought and over 100 degree temperatures can frustrate the most experienced of gardeners and wither the hardiest of plants.

The motivations of home food growers are often complex and different for everyone who puts a seed or plant into the ground. Fresh foods, a love of nature, a history of gardening all are significant and powerful to the individual gardener. But like participation in local farmers markets and community gardens there is a meaningful undercurrent of environmental ethics running through these activities. I will demonstrate in this thesis that home gardening is an expression of ecological citizenship by knowledgeable, concerned and active citizens. To demonstrate this, first I will give a brief overview of criticism against the global food system and increasing attention for an alternative food system. This overview will demonstrate the politicization of food in terms of environmental ethics and politics. I will then build upon both classical citizenship theory and newer theories to discuss the growth within political thinking of environmental, sustainable, and ecological citizenships. I will then describe the framework of ecological citizenship as described by Dobson (2003). Finally, I will show how participation in alternative food systems is an expression of ecological citizenship, and how home gardening is an embodied practice of ecological citizenship.

ALTERNATIVE FOOD SYSTEMS

Environmental concerns have encouraged proponents of alternative food systems as “how we eat is now recognized as a major determinant of how natural resources and human labor are used and misused” (Kloppenburger et al. 2000: 178). Proponents of alternative food systems focus their attention on the environmental consequences of current industrial agriculture that is seen to use a huge amount of natural resources, increase pollution, and rely on vast amounts of fossil fuels in the production and transportation of food. In response many environmentally concerned

citizens have advocated for an alternative food system (Getz 1991, Feenstra 1997, DeLind 2001 as well as Berry 1978, Robbins 1987, Pollan 2006). Hallmarks of the platform of an alternative food system are ecologically sustainable agriculture, local production and distribution systems, participation, seasonal eating, and ethical and democratic treatment of food workers (Kloppenburg et al. 2000, Feenstra 1997). The goals of an alternative food system reach beyond environmentalism, and embrace the health aspects of fruits and vegetables, local economic health, and the maintenance of rural farm culture. Many aspects of desires to participate in an alternative food system can also be found in the environmental concerns of home food gardeners.

Proponents of alternative food systems focus on the re-localization of food production and markets as core tenets of changing food culture. Local food systems “aim to be economically viable for farmers and consumers, use ecologically sound production and distribution practices, and enhance social equity and democracy for all members of the community” (Feenstra 1997). Proponents of local food systems have used many terms and ideas to further these goals. Getz (1991) builds the idea of a more local food system through the ‘foodshed’, defined as the local area where food can be grown, the structure of supply, as well as the social and cultural elements of a community (Getz 1991). Anthropologist Laura DeLind uses the concept of “civic agriculture” to advocate for food localization (DeLind 2001). Civic agriculture “frames a collection of food and farming enterprises that addresses the needs of local growers, consumers, rural economies, and communities of place” (DeLind 2001: 217). Civic agriculture seeks to move away from a mechanistic view of agriculture that solely focuses on production and economic efficiency towards a more holistic view of agriculture, considering food and farming in relation to particular ecological and socioeconomic contexts (DeLind 2001). An important aspect of local food systems is seasonal diets. Eating foods that are grown locally, and in season is

described as both connecting consumers to their local farmers and community, as well as combating the “no season” grocery stores where produce requiring international shipping is available year round.

Consumption occupies a central role for proponents of an alternative food system. Phrases like “buy locally, think globally” dominate the terrain of food activists and demonstrates the importance of ethical or thoughtful consumption to the creation of a more localized, sustainable food system. Michele Micheletti (2003) writes of the new role of the consumer, “this may require that they reflect upon what ecological, ethical, and public footprints they are leaving behind for others to cope with and how their daily routines affect politics, for instance what signals family consumer choices send to industry and the impact they have on the environment” (Micheletti 2003: 8). Proponents of alternative food systems encourage people to take responsibility for the consequences of their consumption behavior (Lockie 2009). The wide array of organic labeled food, fair trade products, and ethical choices in the grocery store highlight the success of politicizing consumption, but also point out its drawbacks. There is growing concern that large corporations will ‘green wash’ their products (Barry 2006). Researchers note that “by themselves, consumer choices do little to challenge this since the refusal of individuals to buy a particular product does not necessarily result in the supply of a more desirable alternative” (Lockie 2009: 200). These critiques of consumption as politics have encouraged some proponents of civic agriculture to create an alternative food space that moves beyond producers and consumers, buyers and sellers in the creation of a more involved, democratic and participatory food spaces (DeLind 2002).

Like green consumption, many aspects of the alternative food movement are starting to face critique and become problematic. Author James McWilliams leads the critique against

central tenets of the alternative food movement in his book *Just Food: Where Locavores Get It Wrong* (2009). McWilliams seeks to move beyond a simple ‘local = good, global = bad’ dichotomy by examining the environmental impact of both local and global food supply. McWilliams uses life-cycle assessments to examine the full range of energy required in the production, transportation and consumption of food (2009: 23). McWilliams cites studies by the Leopold Center for Sustainable Agriculture (2001) that track the life-cycle assessments of food, finding that transportation occupies a small percentage of the total fossil-fuel use involved (11%) while production and processing account for 45.6 %, and home preparation uses 25 % of the overall energy used to produce and consume food made in the United States (Pirog 2001, McWilliams 2009). These results have been demonstrated elsewhere, including results that show that winter tomatoes produced in Spain and sold in Sweden are more energy efficient than those grown in Sweden (Pirog et al. 2001), and that it is four times more energy efficient for London consumers to buy lamb imported from New Zealand than to buy lamb raised locally (Saunders et al. 2006). The researchers of these studies conclude “localism is not always the most environmentally sound solution if more emissions are generated at other stages of the product life cycle” (Saunders et al. 2006). Yet such accounts seem to ignore that local food is often promoted as organic, produced without fossil fuel based fertilizer and processing.

Besides food miles, many factors contribute to the energy used in the food systems, including mode of transportation, production method, and packaging considerations. The global food supply relies on economies of scale, so while food may come from thousands of miles away because a large amount of it was shipped not as much fuel was used as small batches of local products (McWilliams 2009). There is also the problem that many places in the world are not suited for local agriculture. Does buying local produce make sense in dry places such as Tucson,

Arizona or Los Angeles, California where local growing conditions require costly and environmentally damaging irrigation projects? These results have led the National Sustainable Agriculture Information Service to conclude, “Food miles alone are not a valid indicator of the sustainability of the food systems” (Hill 2008:6). The Carbon Footprint Supply Chain Summit (2008) goes further by ranking their assessment of food miles, “Comprehension by public: HIGH, Measurement and calculation: EASY, Planet saving ability: POOR” (Edwards-Jones et al. 2008).

The energy usage comparisons and life-cycle assessments of food are not the only critique of localism promoted by alternative food system proponents. Further critiques ask who has access to the alternative, local, and sustainable foods and markets? Farmers markets, CSAs and local food restaurants are more expensive than other food options, so it is generally the elite few who have the time and money to participate. Agroecologist Patricia Allen (1999) finds that efforts to combine community food security for the poor with local supply of the food often end in failure (Allen 1999). Allen writes, “Local food systems projects based on provincialism may tend to serve the status needs of the privileged more than the material needs of the poor” (Allen 1999: 125). She goes on to warn the price differences threaten to create a two-tiered class-based food system (Allen 1999). Others warn that unreflexive localism threatens to turn the local into a “site of inequality and hegemonic domination” (Dupuis and Goodman 2005:359). McWilliams (2009: 35) echoes these sentiments when he writes, “The result is a local food system in which a self-elected cohort of decision-makers deliver to the masses their own subjective vision of what a healthy, virtuous, and environmentally sound diet should look like”. The result is that access to these local food systems is class based and exclusionary, leaving the majority alienated rather than inspired and empowered.

Despite criticism of alternative food systems, many consumers believe in the environmental, economic, and cultural goals for reshaping the way we eat food. The growth of organic food and beverages, farmers markets, health food stores, and even home gardening demonstrates that people are concerned with how their food is grown, processed, and shipped. Food politics includes concerns over health, local economies, and the global environment. I seek to place home gardening with the framework of green political thought. To do this, I will explore the concept of citizenship, first with a brief introduction to citizenship theory, and then by examining movements within green political thought toward an environmental citizenship.

CITIZENSHIP

Unlike many contemporary debates within political and social theory the theme of citizenship is an old one. Dating back over 2,000 years Greek and Roman philosophers were concerned with the citizen and their role within the political city-state. Citizenship focuses on the relationship between the individual in a society and their larger political world. Changes in the scale of public life, from a face-to-face environment to a larger system where most political relationships were anonymous highlight the development of modern citizenship. This caused a progressive change from the average individual as “citizen” into the “subject” where active political participation was replaced by the passive political person (Reisenberg 1992). Current traditional views of citizenship are divided into two camps over whether citizenship is a contractual relationship specifying duties and responsibilities of the individual in a nation, or on the other hand the rights and entitlements of individuals (Dobson 2003). These two differing conceptions of modern citizenship will be discussed below.

Civic Republican and Liberal Citizenship

Within civic republican citizenship focus is on the duties and responsibilities of the individual within the state, and is defined as active and public (Turner 1990). This conception of the citizen persists in terms of connecting solidarity, commitment, and democracy to citizenship (Barry 2006: 25). Civic republican citizenship defines our duties and responsibilities to our nation state and is found in the everyday activities of paying taxes, voting, serving jury duty and obeying laws. Virtue plays a strong role within civic republican conceptions of citizenship and emphasizes the common good. Providing “service to the community” is a virtue based expression of the duties of citizens to further the common good (Dagger 2000). In summary civic republican citizenship emphasize duties and responsibilities, active public participation, and is a contractual relationship between an individual and the well-defined territory of the nation-state. The properties of civic republican, as well as liberal and ecological citizenship are described in Table 2-1.

Table 2-1: Properties of three types of citizenship²

Type of Citizenship		
Liberal	Civic Republican	Ecological
Rights/entitlements (contractual)	Duties/responsibilities (contractual)	Duties/responsibilities (non-contractual)
Public sphere	Public sphere	Public and private spheres
Virtue-free	‘Masculine’ virtue	‘Feminine’ virtue
Territorial	Territorial	Non-territorial

² Adapted from Dobson 2003

Civic republican citizenship is contrasted in modern citizenship theory by liberal citizenship, which focuses on the rights and entitlements of individuals (rather than duties and responsibilities) within a nation-state (Dobson 2003). This view of citizenship is much more passive and developed from below, wherein the individual is born with certain rights and entitlements (Turner 1990). The virtues of liberal citizenship differ from those of civic republicanism, and “requires vital moral qualities in the citizen to prevent this abuse [of freedom]. Tolerance, self-criticism, moderation, and a reasonable degree of engagement in the activities of citizenship” (Heater 1999: 32). While civic republican and liberal citizenship differ on a number of key issues, they also share a number of features in common; the relationship between the individual and the nation-state is still strong contractual, and based on the defined territory of the nation-state, and its expression occurs in the public sphere (Table 2-1). A number of theories have been developed that challenge some of the basic assumptions of liberal and civic republican theories of citizenship. These will be discussed below, as well as how they have developed to include environmental duties and responsibilities as well as rights and entitlements.

Cosmopolitanism is a view of citizenship that seeks to move beyond the conventional civic republican and liberal views by challenging that citizenship is bounded by the nation-state. Globalization is recognized as a process whereby there is increased interdependence and interconnectedness across international borders, whereby this process involves “a stretching of social, political and economic activities across frontiers...growing magnitude of networks and flows of trade, investment, finance, culture and so on..... and the deepening impact of global interactions and processes such that the effects of distant events can be highly significant and even the most local developments can come to have enormous global consequences” (Held and McGrew 2002: 60-61). Proponents of cosmopolitanism espouse the impacts of globalization as

allowing individuals to have citizenship rights and responsibilities in relation to the whole of the human community first and foremost (Linklater 1998). The growth of extra national and international political and economic bodies (United Nations, WTO, European Union) highlight the increasing global scope of politics, economies, and cultures. The phrase “think global, act local” highlights a cosmopolitan view of global interconnectedness. Cosmopolitan as well as civic republican and liberal citizenships have been applied to environmental issues and have their own forms of environmental citizenships.

Environmental and Sustainability Citizenship

The development of environmentalism within citizenship theory is a recent trend within green political thought. Increased attention on global climate change, habitat and biodiversity loss, widespread pollution, and environmental justice has focused attention on an “ecological crisis”. Major trends emerged within eco-political community, focusing on participation, survival, emancipation, and democracy (Eckersley 1992, Latta and Garside 2005). Focus on democracy came to be seen as fundamental to addressing the ecological crisis by advocating the need for a more participatory, grass-roots approach (Latta and Garside 2005). A new focus on democracy and participation has merged green political thought with modern and evolving citizenship theory, leading to research in what has variously been called environmental, ecological, and green and sustainability citizenship.

Environmental citizenship has been a productive, yet under researched avenue, often accompanying calls for increased sustainability (Dobson and Bell 2006). Like sustainability, environmental citizenship has become a buzzword not only in green political theory, but also outside the academy in the decision and policymaking discourses of state, corporate and civil society organizations (Barry 2006). The spread and popularity of environmental citizenship is

due to its wide applicability as well as the great variety of interpretations. However, like sustainability and sustainable development, environmental citizenship has often been co-opted by corporations in watered down “green washing” forms that do little to challenge underlying political, economic, and social causes of environmental problems (Barry 2006). Within academic theorizing the merits of environmental citizenship have been debated and both accommodated by civic republican, liberal and cosmopolitan citizenship as well as those that see this as a distinct type of green citizenship (Melo-Escribuela 2008).

Proponents of civic republican environmental citizenship see citizenship duties and obligations as addressing and working toward environmental goals and sustainability (Smith 1998). John Barry (2006) has been a strong proponent of this type of sustainable citizenship and notes that “there are obvious dangers in passive (state or corporate-based) forms of environmental citizenship (some of which come close to green consumerism)” (Barry 2006: 25). These theorists see trouble in the dominant institution of liberal government; while environmental problems have been recognized for a number of decades, the current liberal western democracies seem ill suited to deal, and deal in a timely manner, with these issues (Barry 2006). Others echo Barry in these sentiments, calling for a “new politics of obligation”, and even go so far as to say that “human beings have obligations to animals, trees, mountains, oceans, and other members of the biotic community” (Smith 1998: 99). Whether the extension of duties and responsibilities extends to the non-human community is controversial (Dobson 2003), the civic republican commitment to the common good is easily seen in human caused environmental damage where the impacts extend beyond both national borders as well as human communities. Indeed, many of the virtues of critical or resistance green citizenship are mirrored in civic republicanism, including discipline, dedication, commitment to a cause or principles,

solidarity, and steadfastness in the face of opposition (Barry 2006). Barry has been the strongest of these proponents, noting that “states will not become green by themselves” and even going so far as to suggest a duty-based compulsory sustainability service for citizens (Barry 2006: 32, 39). Barry takes a strong stance in defining “sustainability” citizenship as a duty of a green and conscious civil society. Strong civic republican definitions of environmentalism are contrasted by those from the liberal tradition and their integration with environmental goals.

The language of liberal citizenship focused on citizen rights has also been a fertile ground for the incorporation of environmentalism, with some arguing that Marshall’s influential three fold typology of citizenship rights (civil, political, and social citizenship) be expanded to include environmental rights (van Steenbergen 1994). In this context environmental rights are viewed as an extension of basic human rights, “such as the rights to life, personal security, health, and food... In this regard, a safe and healthy environment may be viewed either as a pre-condition to the exercise of existing rights or as inextricably entwined with the enjoyment of these rights” (Shelton 1991: 105). This is important language that has often made it into national constitutions, as “70 countries have constitutional environmental provisions of some kind, and in at least 30 cases these take the form of environmental rights” (Hayward 2000: 558). The right to a clean, safe and non-harmful environment is a central tenant of the environmental justice movement and their focus on civil rights (Dobson 2003). Many proponents make a strong case for the adoption of national environmental rights within the liberal citizenship framework; however this view is often problematic. The nature and extent of environmental problems and their causes are often difficult to identify and support legal action against alleged polluters (Hayward 2000: 564). The sites of pollution and environmental breakdown are often found in areas of poverty and disenfranchisement, where the population has difficulty challenging the established hegemony of

social, political, and economic power in claims of their rights. The notion of rights is a very top-down and passive form of citizenship, relying on the nation-state to uphold these rights, and it is difficult to assume that states will champion environmental human rights in the face of other economic, social, and political interests. Another problem lies in the global and extra-national nature of many environmental problems, which leads into more cosmopolitan conceptions of citizenship.

Cosmopolitan citizenship approaches environmentalism based on the fact that many environmental problems are non-territorial in nature (Christoff 1996). Many environmental problems such as global climate change, ozone depletion, large-scale pollution, and ocean acidification do not respect national borders in their impacts. While contemporary citizenship theories rely on definitions centered on the nation-state, cosmopolitan citizenship argues that the nature and extent of environmental problems requires individuals to act on a broader, more global scale. Often perspectives of cosmopolitan citizenship rely on either moral or historical arguments, “the moral view is that ‘A owes something positive to B not in virtue of any causal role he has had in B’s situation... but because he is able to benefit B or alleviate his plight’. In contrast the historical view suggests that ‘what A owes to B he owes in virtue of some antecedent actions, undertaking, agreement, relationship, or the like’” (Lichtenberg 1981: 81). Cosmopolitanism typically takes either a view that virtue requires us to act within a “common humanity” or a stronger stance that obligations are owed through historical actions (Dobson 2003: 99). While environmentalism has found ample voice by proponents of civic republican, liberal, and cosmopolitan views of citizenship there is a desire to form a distinct view of citizenship based on ecological ethics. One of the strongest promoters has been Andrew Dobson

(2003) in his description of ecological citizenship, which will be outlined below and serves as the basis for this project's examination of home gardeners.

ECOLOGICAL CITIZENSHIP

Andrew Dobson's *Citizenship and the Environment* (2003) has been an important work in defining a distinct and new approach to ecological citizenship. As defined by Dobson, ecological citizenship "deals in the currency of non-contractual responsibility, it inhabits the private as well as the public sphere, it refers to the source rather than the nature of responsibility to determine what count as citizenship virtues, it works with the language of virtue, and it is explicitly non-territorial" (Dobson 2003: 89). Dobson distinguishes ecological citizenship from civic republican, liberal, and cosmopolitan citizenship. To emphasize this difference Dobson refers to ecological citizenship as "post-cosmopolitan" citizenship (Dobson 2003).

Dobson builds his version of ecological citizenship following the "historical obligation" of cosmopolitanism, but extends and strengthens this relationship. He does this through the concept of the ecological footprint. Ecological footprint is defined as "the land (and water) area that would be required to support a defined human population and material standard indefinitely" (Wackernagel and Rees 1996: 158). Ecological footprint becomes a way to measure a given human community's metabolistic relationship with the goods and services provided by its natural environment, accounting for the land requirements for the resource consumption and waste assimilation of defined human populations and communities (Wackernagel and Rees 1996). The fact that individual ecological footprints might be difficult (or impossible) to calculate in actuality is not especially relevant; a key point is that the each individual uses a certain amount of ecological space for their goods and services, and since ecological space is a finite resource,

the ecological space used by one individual, town, city or country draws on the total available for everyone else. All evidence and calculations show that there is a wide inequality of distribution across a whole range of environmental goods and services that is systematically tipped in favor of wealthy (western) countries and their wealthier inhabitants (Chambers et al. 2000). The map in Figure: 2-1 demonstrates the global distribution of ecological footprints.

For Dobson ecological citizenship is a set of responsibilities incurred by the occupation of ecological space (Dobson 2003: 102). In this manner ecological citizenship is not something given by a contractual relationship with a nation-state, but instead it is something that is produced through the metabolistic and material relationship of individual people with their environment. The focus of the ecological footprint moves beyond grand conceptions on the nature of “world citizenship” and “earth’s rights” to a solid, materialistic basis for the relationship not between a citizen and a political authority, but instead between a citizen and other global citizens.

The unjust and unequal use of a limited amount of ecological resources is the basis for the virtue and responsibilities of the ecological citizen, “to ensure that her or his ecological footprint does not compromise or foreclose the ability of others in the present and future generations to pursue options important to them” (Dobson 2003: 132). The key virtue is justice, aiming for a just distribution of ecological space. Dobson’s conception of ecological citizenship both expands and limits the community of citizens. Obligations of ecological citizenship are due to anyone who is owed ecological space – this extends citizenship to the global population, and at the same time to future generations of humans who will require ecological space that is not contaminated or polluted. In this way ecological citizenship is non-territorial in membership.

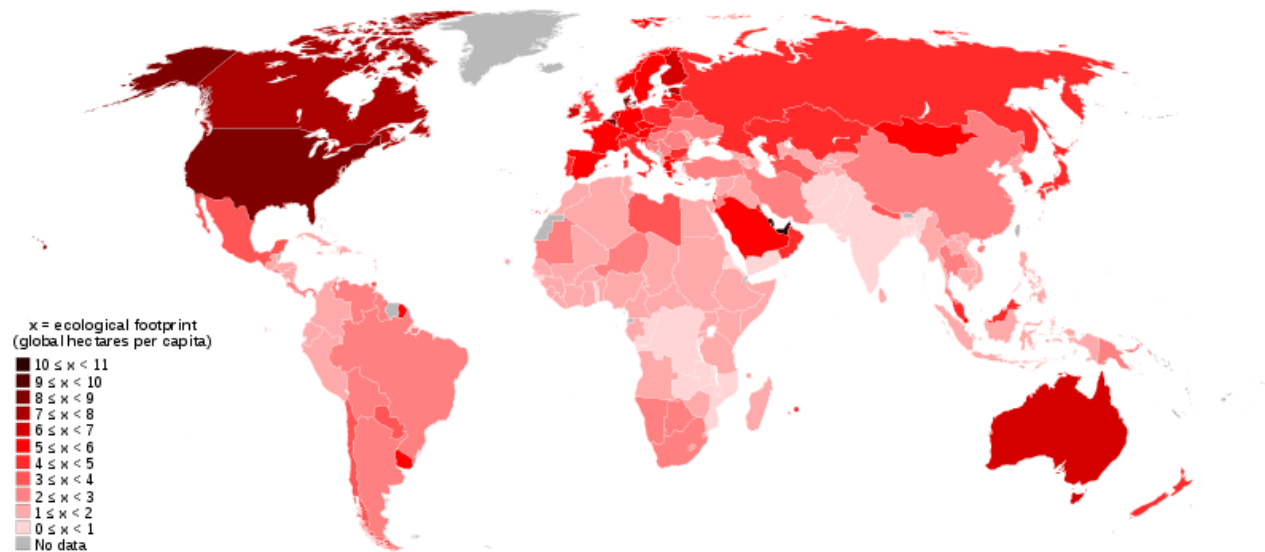


Figure 2-1: World map of countries by ecological footprint (2007)³ Source: Wikimedia

Commons

Private Acts of Citizenship

A key attribute of Dobson's conception of ecological citizenship is the sphere of citizenship activities. Classical views of citizenship embrace the public sphere as the realm of citizenry activity, while minimizing the importance of the private realm. The prioritization of the public sphere is rooted in the earliest conception of citizenship; in classical Greek conceptions citizenship was an emancipation and transcendence from the sphere of necessity and daily life as represented by the household, into the public sphere of political life (Shafir 1998). Classical views of citizenship saw the public sphere as transcendent, rational and ultimately masculine while the private sphere was seen as the feminine realm (Shafir 1998). This view of public citizenship has persisted into the present and is a feature of both civic republican and liberal

³ The total ecological footprint (global hectares affected by humans) is measured as a total of six factors: cropland footprint, grazing footprint, forest footprint, fishing ground footprint, carbon footprint and built-up land. Ecological Footprint = global hectares affected by human / population

citizenship. A number of feminist critiques have challenged the sharp division between public and private life as the sphere of citizenship. The household is no longer a realm of “privation”, and increasing the private sphere is a rich domain where individuals spend most of their time and energy in finding fulfillment (Barry 2006). The private sphere in contemporary western democracies is increasingly the realm of focus, as individuals devote time and energy to private endeavors while public participation in voting and membership of political parties is decreasing (Barry 2006). It is increasingly recognized that private acts can often have public implications, and the private sphere is a legitimate space for the gaze and practice of citizenship (Seyfang 2006: 387).

Challenges to the traditional public view of citizenship are based on a reconception of citizenship not based in terms on political *status*, but instead on *activities* (Seyfang 2006: 387). A move toward the focus on activities aligns with Dobson’s definition of citizenship obligations as stemming from material impacts of unequal use of ecological space (ecological footprints). In terms of the ecological footprint of individual citizens, the private sphere that encompasses the production and reproduction of daily life becomes increasingly important (Dobson 2003). The household is subject to many activities that have a large impact on the ecological footprint of individuals, from energy efficiency, water use, the number and range of automobile use, and indeed the production and consumption of food through home gardening. Many of the proponents of green and ecological citizenship have championed a renewed focus on the private sphere as one (but vital) realm where environmentally conscious citizenship activities are made and practiced (Barry 2006, Horton 2006, Dobson 2003, Seyfang 2006).

According to Horton (2006), “through attempts to transform their own private everyday practices in ways consistent with sustainability, environmental activists demonstrate awareness

of their own (asymmetrical) citizenship obligations” (Horton 2006: 129). For those who are the closest to resembling the ideal of ecological citizenship, such as environmental activists, the private realm of practices becomes the crucial component of their many forms of civic participation that often incorporates more public forms as well. For these activists “environmentalism is an embodied politics, and activists tend to incorporate their environmental concerns and commitments into every cultural practices” (Horton 2006: 130).

Citing environmentalism as “embodied” politics and bringing private household activities within the range of citizenship activity brings up the consideration of consumption as political and citizenship activity. Individual and household consumption behavior is increasingly seen as an arena for activism as environmentally conscious consumers are encouraged to buy “green”, “ethical” and “local” products (Seyfang 2006). Many recognize consumption as a site for the practice of ecological virtue (Barry 2006), and certainly the amount and type of consumption of an individual or household will have a strong influence on their ecological footprint. The plethora of “green”, “energy efficient” and “eco” options for all sorts of consumables is testament to the influence of an ethical and green consumerism.

However, many green citizenship theorists are wary of the integration of citizenship and consumption (Barry 2006, Connolly and Prothero 2008). Making consumers into citizens is problematic for a number of reasons. Barry points out that “consumer behavior considered solely as market actors or property owners, unconnected with a wider political economy of struggle and sustainability citizenship, will not by themselves create a more sustainable society” (Barry 2006: 38). There is also a strong fear that messages of “sustainability” and “green citizenship” will be co-opted by large corporations as a form of green washing, where products are only superficially made to appear environmentally beneficial and the deeper structures of unsustainable production

and distribution are not questioned or challenged (Barry 2006). There is also a danger of environmental consumers being lulled into a false sense of virtue. As suggested, environmentalism becomes an embodied practice that often deeply reflects issues of identity. Individuals identify as “green” and wish to perform actions and activities that are seen to promote environmental and sustainable goals, even though they often are unsure how to act (Connolly and Prothero 2008). There is a sense that “environmentally friendly” is becoming a marketing technique, and “consumers are lulled into complacency by the mistaken belief that they are actually doing something ... people see the solution to the environmental crisis as personal actions, thus deflecting them from targeting large power elites and structural issues” (Connolly and Prothero 2008: 141). Green consumption is contested territory with many commentators pointing out its pitfalls while others see it as one practice among a range of other social, political, and cultural practices that define ecological citizenship.

EXPRESSIONS OF ECOLOGICAL CITIZENSHIP

So far this paper has developed the theoretical perspective that serves as a framework for ecological citizenship. But what does ecological citizenship look like in everyday life, and what types of practices and behaviors define an ecological citizen? To answer this question I will look at a number of authors who have tried to locate ecological citizenship in certain groups, activities, and practices. Finally I will show how the practice of food gardening fits within these practices and the structure of ecological citizenship.

In searching for what ecological citizenship might look like in everyday practice, Horton (2006) uses green activists in northwestern England as a model for this new form of citizenship. Horton describes green activists as participating in an embodied politics, where activists seek “consistency between their ‘political’ positions and ‘personal’ preferences, pursuing practices

compatible with the visions they strive collectively to create” (Horton 2006: 130). Seeking to merge the personal and the political, green activists modify their behavior in a number of ways including the things they choose to consume, their means of transportation, and the livelihoods they seek out. Many types of consumption are avoided altogether or alternatives are chosen among “ethical” versions. These activists live local lives, preferring bicycling and walking to driving a car. Horton locates ecological citizenship within four contexts of the everyday lives of green activists: green networks, green spaces, green materialities and green times (Horton 2006). Green networks are built not only through formal, planned and regular meetings of environmental groups and campaigns, but also in informal gatherings such as conferences, workshop and even potlucks. Green spaces are not only found in the activist office or workers’ co-op, but also in local bars, cafes and vegetarian restaurants where environmental goals and ethics permeate the everyday. Green materialities navigate the complex world of consumption, where some objects (the car) are disdained and avoided while others (computer and internet) are seen as invaluable in furthering the lifestyle and causes of these activists. Finally, green times are those of environmental festivals and protests, when the identity of activists is most affirmed and they are at their “most radical” (Horton 2006). While Horton’s model is a useful example, it is clear that this is only one of many possible expressions of ecological citizenship in a specific place at a specific point in time; the relevant point is that everyday life choices and practices are increasingly the realm of political expression.

Smith (2005) locates the everyday expression of ecological citizenship within the social economy, the “broad category of organizations: co-operatives, mutual and voluntary organisations, associations and foundations that engage in economic activity (traded or non-traded) with a social remit” (Smith 2005: 276). The social economy is contrasted with other

organizational types – voluntary organizations, capitalist corporations, public authorities and the informal economy. Smith describes the social economy as the avenue for ecological citizenship based on two characteristics: ethos and structure. For organizations operating within the social economy profit comes secondary to explicit social aims. The structure of social economy organizations is more democratic in comparison with hierarchies and divisions of labor that define corporations and public bureaucracies (Smith 2005). The democratic structure of these organizations allows for increased participation and decision making from participants, volunteers, and stake-holders. For Smith, the ethos and structure of social economy organizations allows them to develop ecological citizenship understood as the recognition of duties in relation to the environment and taking responsibility to act in line with those duties as defined by the use of unequal ecological space promoted by Dobson (2003). While not stated by Smith, farmer's markets (Athens Farmer's Market) are valuable and relevant examples of ecological citizenship as expressed through the participation in the social economy. The farmer's market, while market oriented, is focused around an ethos of localism, sustainability, and environmental consciousness. Recognizing farmer's markets as social economic expressions of ecological citizenship allows us to consider the role of food production, distribution and consumption as a valid realm within which to consider ecological citizenship.

Gill Seyfang has written about the expression of ecological citizenship through both sustainable consumption (2005) and within local organic food networks (2006). Seyfang (2006) posits that participation in local organic food networks is an expression of ecological citizenship, and tests this through an empirical study of participants in Eostre Organics, an organic food producer co-operative in the United Kingdom. The rationale for considering local organic food within this framework arises from a number of issues. The idea of "food miles" plays an

important role – the widespread global flow of food is seen to cause large energy use and pollution in transportation. The large corporate (and global) food supply is described as propped up by economies of scale and large agricultural subsidies, which in turn externalize the environmental and social costs of food production and transportation (Seyfang 2006). Seyfang describes local organic food networks as “in direct contrast to the globalized food system which divorces economic transactions from social and environmental contexts, the ‘new economics’ favours ‘socially embedded’ economies of place” (Seyfang 2006: 386). From the interviews and interactions with participants in a local organic food network, Seyfang concludes that this participation is in line with ecological citizenship as described by Dobson (2003). Seyfang concludes, “The values and principles expressed by both creators and users of this local organic food network are strongly resonant with ecological citizenship, and a strong environmental ethic is a significant – if not primary- motivation for of the participants. They sought to express preferences which were at odds with market prices signals, they demonstrated a clear commitment to justice and fairness in trading relationships, to reducing ecological footprints through localizing food systems and reducing packaging waste, and sought to make links of solidarity between producer and consumer” (Seyfang 2006: 393). Seyfang affirms that food production and consumption is fertile ground for the expression of ecological citizenship, and lead to the relevant question of whether home food gardening is active expression of ecological citizenship.

Chapter 4 further develops the connection between food gardening and ecological citizenship, and the relationship between motivations, practices, and environmental impacts, but it is useful to here examine the practice of food gardening in connection with expressions of ecological citizenship as developed by the previous authors. Certainly many of the same desires

and motivations that led Seyfang (2006) to conclude that participation in local organic food networks is active ecological citizenship would also apply to food gardeners: a desire to lessen the ecological footprint, limit herbicide and pesticide use, and explore alternatives to the mainstream global food system. Smith's (2005) description of ecological citizenship as located in the social economy can also apply to food gardening. While the goal of gardening is rarely to market the produce, there are strong social and economic aspects. Often saving money is a strong motivation for gardening, as well as the myriad of social formations that form around the practice. These are often informal; neighbors, family and friends exchange, trade and barter their seeds and produce. They can also be formal, such as gardening clubs, community garden organizations, and the Master Gardener program in which many gardeners participate. The food garden also aligns with Horton's (2006) concept of the green space. Gardens are both literal and metaphorical green spaces; they are personal arenas of interaction with nature, as well as metaphorical spaces where environmental ethics as well as understanding are constructed, a place where "individuals can develop complex, sensual and personalized readings of nature" (Bhatti and Church 2001). Relating to Dobson (2003), gardening impacts the ecological footprint of households in often complex ways. These factors will be analyzed closer in chapter 4, but an initial view suggests food gardening as a relevant avenue for ecological citizenship.

Dobson's reconception of citizenship as based in material relationship in both the private and public realms highlights the importance of *practices* over political *status* as crucial in the expression of citizenship (Dobson 2003, Seyfang 2006). The focus on practices permits the incorporation of practice theory for further insight into the expression of ecological citizenship.

PRACTICE THEORY

Theories focused on understanding practices have been developed by philosophers, social theorists, cultural theorists, and theorists of science and technology (Schatzki 2001). While summarizing this corpus is beyond the scope of this thesis, of crucial importance is the role of practices in relationships between individuals and the larger cultural, economic, and political structures in which activities are mediated. Practice theory offers a middle ground between methodological individualism that posits that culture is the sum of individual's actions and agency and methodological holism, which views individuals' actions confined by a unified and systematic overarching culture (Rouse 2006). Practice theory suggests that individual agency happens not only within larger cultural structures, but the production and reproduction of individual practices is able to change and impact these structures. This view of practice reflects Bourdieu's theory of habitus, or "the socially acquired systems of behavior, thought and perceptions" (Bourdieu 1977). Habitus defines the cultural structure through which practices are performed and given meaning, but practices can also change, be adapted and reshape those larger structures. Through involvement in certain practices "people acquire the specific dispositions and sensibilities that lead them to orient themselves in relation to their environment and to attend to its features in the particular ways that they do" (Ingold 2000: 162, Bourdieu 1990). Practices occur within "structures embracing ends, projects, tasks, purposes, beliefs, emotions and mood" (Schatzki 1996: 89). Practices are embodied, placing the individual body within their larger world and "the skilled body commands attention in practice theory as the common meeting points of mind and activity and of individual activity and society" (Schatzki 2001: 3).

In this way common practices represent shared skill and shared understandings. In seeking to understand the practices of ecological citizens within a wider context it is important to

recognize that these practices are the domain of personal *choice*; people choose to not drive a car, or to engage in environmental protests or sustainable consumption or home food production. The choice to participate in these practices is often part of a set of alternative lifestyle choices. Guided by environmental ethics, choices are made outside of the mainstream view of consumption, transportation, and political involvement. These alternative practices define new ways of both working within the larger cultural habitus, as well as improvising new practices that fit within an individual's moral conception of the opportunities available to them.

While many ecologically and environmentally minded practices form a significant expression of ecological citizenship, home food gardening offers a novel activity as it involves transforming the home landscape into one that is in agreement with political and environmental ethics. While sustainable and ethical consumption is a valid form of ecological decision making, these exist within the well-defined realm of consuming goods and services. Likewise green social economy activities exist alongside other economic activities. Gardening is often a choice to either enter into a new realm of practice, or significantly alter the practices associated with home landscapes. Home food growing has been uncommon in modern America following the industrialization and mechanization of food production, and instead the area around home has been used for turf grass (Lawson 2005). The practices that are associated with a typical American home landscape are mowing the grass, applications of fertilizer and pesticide chemicals to the lawn, and the trimming ornamental bushes and shrubs. Adding a home food garden to the space around a house transforms these landscaping practices into a new set of practices. For many inexperienced gardeners, these practices are novel ways of approaching their relationship with their home landscapes.

Home food gardens are not grown in the mind; instead they are grown through seasonal labor that involves timing, planting, digging, pulling weeds, and an assortment of activities that put motivated bodies into motion. Gardening practices will often expand with experience and growing knowledge about involvement with the home landscape. A garden will encourage the installment of a compost pile, seed saving, and sharing of knowledge and experience with others who grow food. These practices can expand beyond the home landscape, as home gardeners form communities of gardeners that express their interest through garden clubs or the establishment of a community garden. Home food gardening is a meeting point for environmental concerns and home landscape activities (mind and activity) as well as between individuals practices and their relationship with the global food system (individual activity and society) (Schatzki 1996: 3).

Communities of Practice

Practices don't take place in a void, instead they are placed within a cultural structure and the attendant social relations; in this way all practices are social practices. Collective practices result in communities that form by the sustained pursuit of a shared enterprise (Wenger 1998). The nature of social practices makes them significant for learning, meaning, and identity. These shared goals and motivations lead to the creation of communities of practice, whereby individuals participate collective learning and behaviors within a shared domain (Wenger 1998). Beyond collective learning and behaviors, participants in communities of practice develop a mutual constitution of the world (Ingold 2000). Members of a community of practice not only share a common identity forming from their shared enterprise, but also share common dispositions and sensibilities in how they approach and understand the world around them.

Individuals who grow food in their households are active participants in communities of practice. These individuals are connected not only in their shared digging and weeding, or their shared knowledge of how to deal with the ever present pests, but also in how they construct meaning and identity out of their practices. Common meaning and identity is expressed in both formal and informal communities that develop around the practices of growing food in the home. Neighbors who share seeds and tips to keep deer away also share an approach to managing their domestic landscapes. Conversations between neighbors about how to grow vegetables organically can quickly turn into sharing information and perspectives about the perceived dangers of the industrial food system and awareness and participation in pro-environment causes. More formal communities of practices that form around gardening include garden clubs and community gardens. These communities share common dispositions toward their relationships with their community and their land. While often unstated, gardeners share more than seeds or information about how to deal with pests; they share a common ecological ethic that describes their nurturing of the land and desire to lead a more healthy, active and environmentally ethical life.

CHAPTER 3

FOOD SPACES AND THE GEOGRAPHY OF SOCIO-ECONOMIC ACCESS

In this chapter I seek to understand the spatial relationships of food gardening and food markets with ethnicity and socio-economic class in Athens Clarke County. Socio-economic status is significant in examining environmental ethics in Athens, as “race, class, and gender have had profound impacts on people’s environmental experiences, which in turn has had significant impacts on political development, ideology, and activism” (Taylor 2002: 40) The concepts of class and identity as tied to the socio-economics of different areas is important in understanding both who participates in home gardening as well as which members of the community have access to fresh food. Class, identity, and food gardening will be discussed below, followed by an overview of food deserts and their role in access to fresh food, with emphasis on food deserts within Athens. A spatial approach will be used to examine how home food gardens, stores to buy fresh food, and community gardens are geographically distributed throughout Athens. The significance of using a spatial approach to examine food gardening and food access in Athens emerges from the demographic profile of the town; Athens has a large number of low income and below poverty level inhabitants who live in spatially contiguous neighborhoods. Access to food and differential participation in food gardening practices describe the setting within which environmentally conscious gardening practices take place.

CLASS, IDENTITY AND FOOD GARDENING

While the academic research of home gardening in Western nations is somewhat scant, a number of sociologists have written about how class based social identity is important in

understanding the presence or absence of home gardens and the form and function they take in everyday lives (Bhatti and Church 2001, Bhatti and Church 2004, Taylor 2008, Hondagneu-Sotelo 2010). Mark Bhatti has devoted significant energy to describing the role of home gardening in the UK. While the majority of his writing focuses on the role the garden plays in mediating complex notions of culture and nature, he also develops the idea of the garden as part of the home making process and construction of a domestic “sense of place” (Bhatti and Church 2001: 368). For Bhatti, the garden is an important part of the home making process, which contribute to key meanings of the home “in relation to privacy, security, family/kinship, leisure, house space/design and ownership” (Bhatti and Church 2001: 369). The process of home making, and thus garden making, encompasses a complex mixture of economic and social process, and these practices are often informed by and embodied in class-based notions of identity. Gardening is described as highlighting “complex relations between leisure attitudes and age, gender, income and time availability” which differ between socio-economic classes as well as gender, age, and cultural and national identities (Bhatti and Church 2001: 367).

Lisa Taylor (2008) examines the garden as a space where identities of class are played out in the town of West-Yorkshire, UK, through the lens of ordinariness in everyday life as a significant realm where identities are enacted. Taylor uses interviews to conclude that there are significant differences between working-class and middle-class garden meanings and aesthetics (Taylor 2008). She found that working-class gardeners often lack the horticultural and botanical knowledge displayed by many middle-class gardeners. The two groups also have a very different conception of the work required to maintain a garden space; while working-class gardeners would talk often about the labor and work involved, middle-class gardeners would gloss over the labor involved by claiming gardening as “relaxing”, “therapeutic” or “good exercise” (Taylor

2008: 116). Another key attribute was the sociability of gardening. Working-class gardeners used their garden as a way to connect with their local and surrounding community; the garden was a talking point between neighbors, seeds and plants were commonly exchanged, and the garden was a point of visual pride for working-class gardeners who relished compliments and local interaction. This contrasts sharply with the middle-class gardeners who “left the local community unmentioned”, did not discuss local trading and sharing, and did not seem to care what local people thought of their garden; instead these middle-class gardeners participated in formal garden clubs and horticultural societies beyond the immediate community (Taylor 2008: 116). Working-class gardeners cultivated a specific garden aesthetic, attempting to both engage with their local community and display a neat, orderly appearance to their home to combat historical perceptions of the working class as a “degenerate, fecund, savage and irresponsible mass” (Taylor 2008: 117). In contrast middle-class gardeners were seen to embrace wildness and scorn tidiness in the garden for the express intent of distancing themselves and their identities from the gardens of working-class neighborhoods (Taylor 2008: 123). For Taylor, gardens are important sites of social distinction where class based identities are inscribed in the meanings and appearances of the garden.

Hondagneu-Sotelo (2010) examines the practice of gardening in Los Angeles, California. She writes of the importance of the garden as a site of academic inquiry, as spaces that “reflect prevailing social relations of power, culture, race, class, and gender, and there are important social and environmental consequences connected to the way we garden” (Hondagneu-Sotelo 2010). She sees gardens as an important location for the cultivation of identity, and contemplates the inherent differences between middle class “eco-friendly”, “gardening center” gardeners and Mexican immigrants who grow corn in their front yard. She suggests that gardening is highly

influenced by class and socio-economic status, both reflecting and creating social inequalities in access to labor, products, and privileges that are embodied in the garden (Hondagneu-Sotelo 2010: 502). These three authors demonstrate the importance of the garden within everyday socio-economic and class identities. Not only is class important in the appearance, function and motivation for home gardening, but often it is significant for understanding the presence or absence of gardens in certain neighborhoods. The role of socio-economic status and gardening in Athens-Clarke County will be examined presently, but first I will discuss the role of socio-economic status in relation to access to fresh food and participation in the food system through the idea of the food desert.

FOOD DESERTS

The socio-economic and spatial patterns of home food gardening is part of the food landscape in different neighborhoods in Athens-Clarke County. The food landscape also includes grocery stores, farmers markets, and community gardens. The geographic location of these different elements in the food landscape has important effects for differential access to fresh food between different neighborhoods. Food deserts are an important idea in seeking to understand the role that socio-economic status plays in access to and participation in the local food landscape. Food deserts have become a popular and well-researched avenue for understanding access to food and health disparities in racial/ethnic as well as low socio-economic status neighborhoods (Walker et al. 2010). The phrase “food desert” has its origin in the early 1990s in Scotland by a resident of a public housing sector scheme (Cummins and Macintyre 2002). While the phrase has slightly different meaning for different researchers, food deserts are most commonly inner city or low income areas that do not have access to food or grocery stores so residents cannot buy affordable healthy food such as fresh fruits and vegetables. Inner city and low income areas often

lack grocery stores, but are high in the number of convenience and fast food stores from which to buy food (Drewnowski and Specter 2004). Convenience stores and fast food restaurants provide energy dense, “empty calorie” food containing higher content of fat, sugar, and sodium and often leading to poorer health outcomes than diets of fresh fruits and vegetables (Swinburn et al. 2004). Researchers have noted that people tend to make food choices based on the food outlets that are available by being close to their homes (Furey et al. 2001). For these reasons food deserts are seen as a crucial component for disproportionately higher rates of morbidity, mortality and adverse health outcomes in low socio-economic and racial/ethnic minority neighborhoods (Walker et al. 2010).

A number of different theories have been proposed to explain the causes of the formation of food deserts in the United States, which are often complex and historical. One theory suggests that food deserts are the consequence of the opening and closing of grocery stores (Guy et al. 2004). The growth of large chain supermarkets occurred on the outskirts of inner-cities in more affluent areas, and these supermarkets offer better quality, variety and price for food options. The growth of large supermarkets on the outskirts of the city and in the suburbs forced the closing of smaller, independent neighborhood grocery stores that were closer to the city (Guy et al. 2004). This new model of giant supermarkets on the outskirts of cities and in suburbs makes access only available to those with cars or those willing to pay for public transportation. A similar theory uses economic changes in U.S. cities between 1970-1988 as the cause of food deserts (Walker et al. 2010). During this period economic segregation became more pronounced in cities, and affluent populations increasingly moved to the suburbs. This shift caused the median income of inner-cities to drop, and forced a great number of inner-cities groceries to close (Walker et al. 2010). Other factors include complex inner-city zoning laws, inaccurate perceptions of inner-city

areas and declining demand for low-skilled workers (Walker et al. 2010). While it is important to understand the causes of food deserts, their role in access to food in low socio-economic and racial/ethnic neighborhoods is undeniable.

A significant amount of research has focused on food deserts and their role in access to fresh food, relationship with racial/ethnic disparities, correlation with socioeconomic status, and differences in chain versus non-chain stores (see Walker et al. 2010 for review of food desert literature). Access to supermarkets in Philadelphia, PA is a well-cited example of the importance of access in food deserts (Weinberg 1995, Giang et al. 2008). Researchers have shown that in Philadelphia the highest income neighborhoods have 156% more supermarkets than the lowest income neighborhoods (Weinberg 1995). Insufficient access to grocery stores is compounded by a lack of public transportation as well as in-town groceries located in unsafe neighborhoods (Weinberg 1995).

Along with issues of access, the racial and ethnic composition of a neighborhood is an important factor in food deserts; studies have found that predominately black neighborhoods have fewer supermarkets than neighborhoods that are predominately white (Morland et al. 2002). Other research has suggested that the availability of grocery stores in black neighborhoods is only 52% of that in white neighborhoods (Powell et al. 2007). Similar information has been reported for the city of Detroit, Michigan (Zenk et al. 2005), finding that impoverished black neighborhoods have fewer groceries than impoverished white neighborhoods. Low-income areas, which are frequently areas of ethnic and racial minorities, often face economic and spatial barriers to quality food. Results have shown that there are not only fewer groceries in low income areas, food prices are often higher and food quality is poorer in areas of high poverty (Hendrickson et al. 2006). High rates of crime are cited as being responsible for the higher cost

of food in many of these low income areas (Hendrickson et al. 2006). Issues of transportation again are important; low-income neighborhood residents often do not have a car or are unable to spend the time and money on public transportation to reach further away supermarkets. It also has been found that when there are supermarkets in low-income areas, they tend to be non-chain stores (Chung and Myers 1999). Non-chain stores tend to be smaller and only stock leading brand items in smaller package size, and comparisons have shown that consumers who shop at chain stores pay less money for the same goods (Chung and Myers 1999). Understanding how socioeconomic, class and racial factors impact both participation in food systems (alternative or not) as well as access to food allows us to turn our attention to the state of food and access to food in Athens, GA.

FOOD DESERTS AND GARDENS IN ATHENS

Are there food deserts in Athens, GA? And how do they affect access to food by different neighborhoods, and how does the presence of home food gardens fit into the built food environment of Athens? I will answer these questions with census data and the USDA Economic Research Service Food Access Research Atlas. Certainly, Athens Clarke County has many characteristics that make it susceptible to food deserts. Athens has almost twice the percentage of the population living below the poverty level (36.3 %) than the state average (16.6%), and a large number of black (19.3%) and Latino (8.0%) populations living within Athens Clarke County (Table 3-1). Census Data also shows that there is low integration of different racial and ethnic groups by neighborhood (Table 3-2), the poverty rate is much higher in Latino and black populations (Table 3-3), and unemployment is also higher in Latino and black populations than white populations (Table 3-4) (Diversity Data: Athens-Clarke County, U.S. Census Bureau).

Table 3-1: Athens-Clarke County: Share of Population by Race/Ethnicity (Diversity Data: Athens-Clarke County, U.S. Census Bureau)

Ethnic Group	2010 US Census
Hispanic	8.0%
Non-Hispanic White	67.8%
Non-Hispanic Black	19.3%
Non-Hispanic American Indian	0.1%
Non-Hispanic Other Race	0.2%
Non-Hispanic Multi-Racial	1.4%
Non-Hispanic Asian/Pac. Islander	3.2%

Table 3-2: Segregation of the Population: dissimilarity with Non-Hispanic White by Race/Ethnicity (Diversity Data: Athens-Clarke County, U.S. Census Bureau)

Ethnic Group	US Census 2010
Non-Hispanic Black	42.3%
Non-Hispanic Asian/Pacific Islander	36.8%
Hispanic	44.9%
Non-Hispanic American Indian	24.1%

Definition: Dissimilarity is the evenness with which one racial population group is located (or segregated) within a metro area, with respect to another racial group. The dissimilarity statistic is interpreted as the proportion of one racial group that would need to relocate to another neighborhood (census tract) for that racial group to be distributed across the metro area like a second (reference) racial group. A value of "0%" reflects absolute integration; a value of "100%" reflects absolute segregation. (Diversity Data: Athens-Clarke County)

Table 3-3: Athens-Clarke County: Poverty Rate by Race/Ethnicity (Diversity Data: Athens-Clarke County, U.S. Census Bureau)

Ethnic Group	% of Population
Hispanic	28.3%
Non-Hispanic White	17.8%
Black	28.2%
Indian	38.2%
Asian/ Pac. Islander	27.0%

Table 3-4: Athens-Clarke County: Unemployment Rate by Race/Ethnicity and Gender (Diversity Data: Athens-Clarke County, U.S. Census Bureau)

Ethnic Group	Male	Female
Black	13.0%	11.0%
American Indian	0.0%	0.0%
Asian/Pac. Islander	7.0%	13.0%
Hispanic	11.0%	10.0%
Non-Hispanic White	5.0%	7.0%

The USDA Economic Research Service has undertaken an extensive study and mapping of food deserts in the United States (USDA ERS: Food Access Research Atlas). This program defines food deserts as a “*low-income census tract* where a substantial number or share of residents has *low access* to a supermarket or large grocery store” (USDA ERS Food Access Research Atlas: Documentation). The USDA ERS Food Access Research Atlas uses population and income data from the 2010 U.S. Census, and grocery store data comes from a directory of supermarket and large grocery stores authorized to receive Supplemental Nutrition Assistance Program (SNAP) benefits in 2010 (USDA ERS Food Access Research Atlas: Documentation).

Low-income is defined as any census tract has a poverty rate of at least 20 percent, and low access to a healthy food retail outlet is defined as being at least 1 mile from a supermarket or grocery store. If the number of people within a census tract with low access is at least 500 or the percentage of people in the census tract with low access is at least 33 percent, then the census tract is considered a food desert (USDA ERS Food Access Research Atlas: Documentation). The USDA ERS allows internet users to browse maps of the United States for food deserts, and the map for Athens-Clarke County is shown below in Figure 3-1.

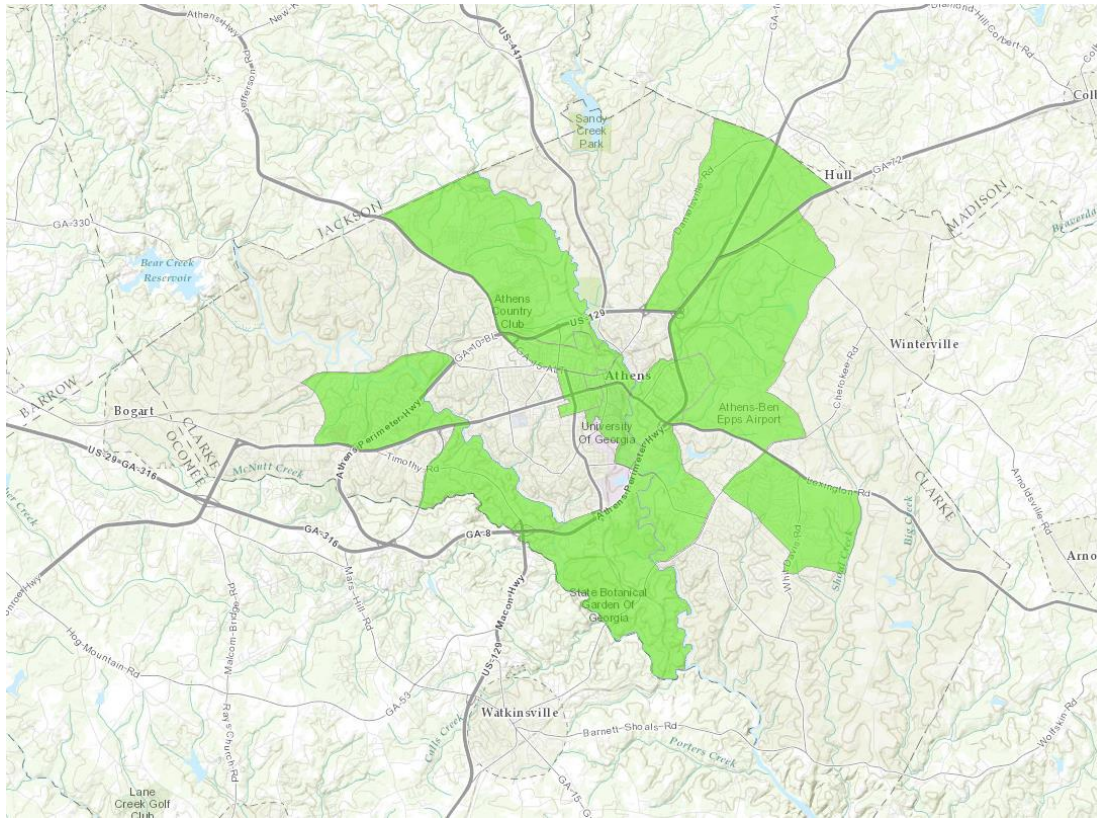


Figure 3-1: USDA Economic Research Service: Food Access Research Atlas Map of Athens Clarke County. Food deserts by census tract shown in green. Source: USDA ERS Food Access Research Atlas

As implied by Figure 3-1, 13 of the 17 census tracts that make up Athens-Clarke County are officially recognized by the USDA as food deserts. This includes the low-income census block groups that were surveyed for this project. Clearly, access to food is an issue in Athens-Clarke County. Besides geographic location, there are a number of cultural and economic considerations that are important concerning access to fresh food. For example the grocery Earth Fare is centrally located in Five Points, and some of the lower income neighborhoods in Athens are geographically close to this grocery. However, Earth Fare caters to a certain consumer; organic, vegetarian and healthy food is sold here at prices significantly higher than in conventional supermarkets such as Kroger. Many low income residents might choose not to shop at Earth Fare; the food is higher priced and foods like organic arugula and quinoa are outside the

cultural norms of certain diets. Research has shown that low income residents cite cost as a reason for why they do not purchase organic food (Dibsdall et al. 2003). Lack of access to supermarkets and grocery stores defines much of urban Athens as a food desert. Other issues such as price and the availability of culturally recognized and significant food items are important factors in describing the food landscape of certain neighborhoods. Like other places in the U.S. this picture paints an uncommonly grim picture about the lack of fresh produce in the Athens-Clarke County area. However, in Athens, my informal data indicate that like other places in the U.S., small, often ethnic groceries do provide more opportunities to purchase fresh produce. I will now turn to how location and socioeconomics affect the landscape of home gardeners in Athens Clarke County.

GARDEN RESULTS

In my visual estimation of food growing households in Athens-Clarke County I found 138 food growing households (n=138) in the six census block groups that I sampled. In Table 3-5 I present details about the profile of these six block groups and the number of gardens found in each. Figure 3-3 is a map of the 138 food-growing households in the six block groups surveyed in Athens.

Table 3-5. Attributes of selected and surveyed Block Groups in Athens-Clarke County
(American Community Survey 2007-2011)

Block Group	Median HH Income	Population	Households	%Homeowners	Percent Minority	Gardens	Gardens per 100 HH
High Income Block Group 1	\$ 123,063	850	349	89%	10.5%	24	6.87
High Income Block Group 2	\$ 79,792	1045	431	74%	2.5%	25	5.80
Mid -Income Block Group 1	\$ 47,813	1117	573	52%	14.4%	33	5.76
Mid - Income Block Group 2	\$ 37,817	1577	724	36%	18.8%	34	4.70
Low Income Block Group 1	\$ 20,988	1569	440	41%	86.7%	14	3.18
Low Income Block Group2	\$ 16,084	834	379	24%	82.3%	8	2.11

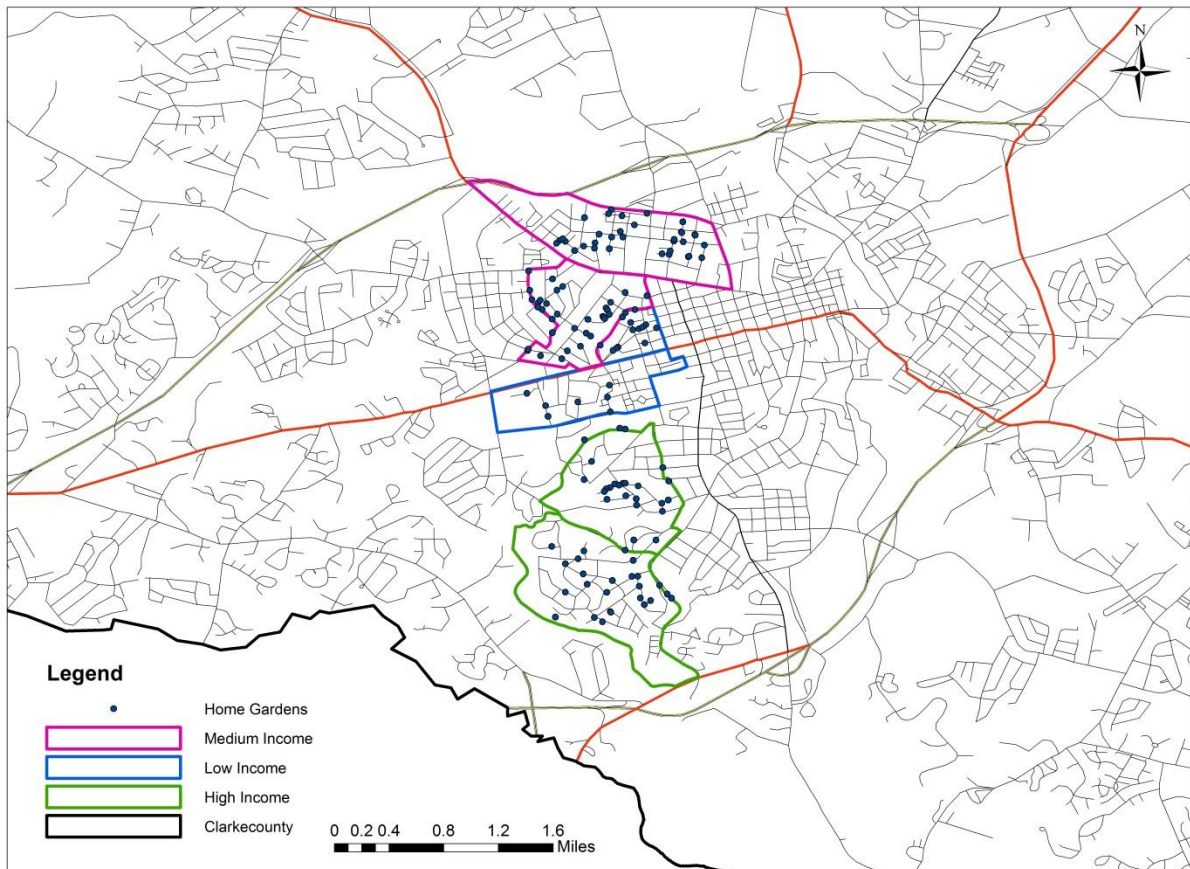


Figure 3-2: Home Gardens by Census Block Group in Athens-Clarke County

Table 3-5 and Figure 3-2 demonstrate that for the low median income block groups there were both fewer gardens, and fewer gardens per 100 households. There were 14 and 8 gardens in the lowest income block groups, compared with 33 and 34 in the middle income block groups, and 24 and 25 in highest income block groups. The number of home gardens per 100 households was also lowest for the low income block groups, at 2.11 and 3.18 gardens per 100 households. While Bhatti and Taylor write about the class implications of gardening in the United Kingdom, these observations hold true in Athens Clarke County. If class and socioeconomic status are

embodied in garden making in the household, these factors are also important in the presence or absence of gardens in these different neighborhoods.

There are numerous reasons for why there are fewer households growing food in low income areas in Athens. While exploring why lower income households garden less was not the focus of my research project, my observations and interviews during this project allow me to come up with some possible reasons for this. First, it is possible that these numbers are the product of my garden surveying research methods. I walked and rode my bike on all the surface streets in these neighborhoods, which may have caused me to under-represent gardens in low income neighborhoods. Houses in these two low income block groups are closer together, with less lawn spaces and are often surrounded by fences. This often prevented me from seeing possible gardens that would be in people's back yards. It is possible that low income households garden more than I reported, but that their gardens are hidden in back yards while middle and high income households display their gardens in front or side yards, allowing these to be counted.

Other possible reasons for fewer gardens in low income areas come from Taylor (2008), as well as my own observations. As described by Taylor (2008), lower income gardeners have lower economic, cultural, and social capital to apply to the garden (Taylor 2008: 109-117). Home gardening often requires a significant economic investment, especially in setting up the gardens. Soil, tools, seeds, plants and any gardening structures (raised beds, trellises, tomato cages) are often purchased to establish a working, productive garden. Lower income households might not have the economic resources to apply to these initial investments, especially if the food is not harvested for a number of months. Lower income households also have less cultural capital in the form of knowledge and information to apply to gardening (Taylor 2008). Taylor notes that

lower income gardeners did not have a sufficient horticultural vocabulary for example often calling plants by common names or not knowing the names, while high income gardeners often knew the scientific names of all of their plants, as well as speaking about complex biological processes like photosynthesis and nutrient cycling (Taylor 2008: 117). Growing a successful vegetable garden requires a certain amount of horticultural knowledge; knowing what to plant and when to plant it, how to fertilize it properly, and how to deal with pest, weeds or pathogens that might inhibit the growth of the garden. Taylor also notes that gardeners in lower income neighborhoods had less social capital than those that grew food in higher income neighborhoods. High income gardeners were members of horticultural societies where knowledge and information as well as seeds, plants and often labor was exchanged between other high income gardeners. When high income gardeners had difficulties, they could approach official and unofficial institutions for assistance, while lower income gardeners lacked access to these institutions (Taylor 2008: 116).

A third possible reason for fewer gardens in low income block groups was suggested to me during an interview for this project. The respondent was a professional horticulturalist who had extensive experience with home gardening, as well as participating in gardening projects at local elementary and middle schools that served low income neighborhoods. During the course of the interview, the respondent suggested that low income neighborhoods have fewer gardens because of historical racial reasons. The low income block groups in this project have majority black residents. My respondent suggested that many within black culture are not interested in growing food because there is a strong cultural association between agriculture and slavery in the South. This is a possible suggestion for why fewer people grow food in low income black neighborhoods.

Observations I made during my research also coincide with those made by Taylor. The nature of what was grown in lower income gardens was different from middle and higher income gardens. Middle and higher income gardeners tended to grow a typical array of summer vegetables: tomatoes, peppers and squash. These were ubiquitous in the mid and higher income gardens, especially tomatoes which tended to show up in every gardening household. Lower income gardens that were in black neighborhoods tended to include crops that are often associated with traditional black cuisine; okra, corn, and collards.

Another observation matches Taylor's description of the social capital available to gardeners. While almost every gardener I spoke with had a set of family, friends and neighbors with whom they discussed gardening methods and techniques, middle and higher income gardeners had access to a wider set of social networks. Many of these gardeners were members of social gardening clubs (especially the Boulevard Garden Club) or were participants in USDA Cooperative Extension Service Master Gardener programs. Master Gardeners are able to access a wide variety of resources including classroom instruction in horticultural methods, participation in formal gardening projects, and direct access to extension agents. Participants in these institutions were almost exclusively located in middle and higher income block groups. Increased social capital was reflected in gardens; members of these associations tended to have large, organized and well-planned gardens complete with hallmarks of their higher economic capital such as raised beds, composting bins, rain barrels, and well landscaped yards. Race and socioeconomics are an important aspect in not only the presence or absence of gardens, but also their character, appearance and use.

COMPLETING THE FOOD PICTURE: COMMUNITY GARDENS

While community gardens are not the focus of this research project, they are of increasing importance especially in low-income urban areas. Many have noted the importance of community gardens in providing increased access to fresh produce, as well as providing many social, educational and economic benefits for low income neighborhood residents (see 2005 for an overview of the history and increasing importance of community gardening). In Figure 3-4 I map the community gardens in Athens Clarke County (Data from Taylor S. Logan Ladd, Athens-Clarke County Community Gardens, 2012. see Appendix C for list of community gardens).

Most of the community gardens in Athens are coordinated by the Athens Land Trust, which runs a community garden network. Many of these community gardens have been designed to serve the needs of a particular community. For example, the ACC Council on Aging runs a community garden so elder community members have a safe and easily accessible place to grow food. The University of Georgia coordinates the Family Housing Garden and UGarden as places of teaching as well as locations where students can grow food. In particular, the Broad Street Community Garden is an interesting development of a garden in a low socioeconomic neighborhood. This garden is a new project in the low income, majority Black Rocksprings neighborhood. The Broad Street Community Garden is only 1 year old, and has started functioning as a market garden. The garden offers residents the opportunity to work in the garden, often for pay or free produce, and offers produce half-off to residents in the neighborhood. The garden also offers opportunity for school children to work and learn about horticultural practices. While this venture is new, the garden has success in reaching out and working with residents of the neighborhood. The garden has plans for further expansion in the

future, and is positively positioned to engage low income Black residents in food production, residents who might have been hampered before by lack of money, knowledge, or social capital.

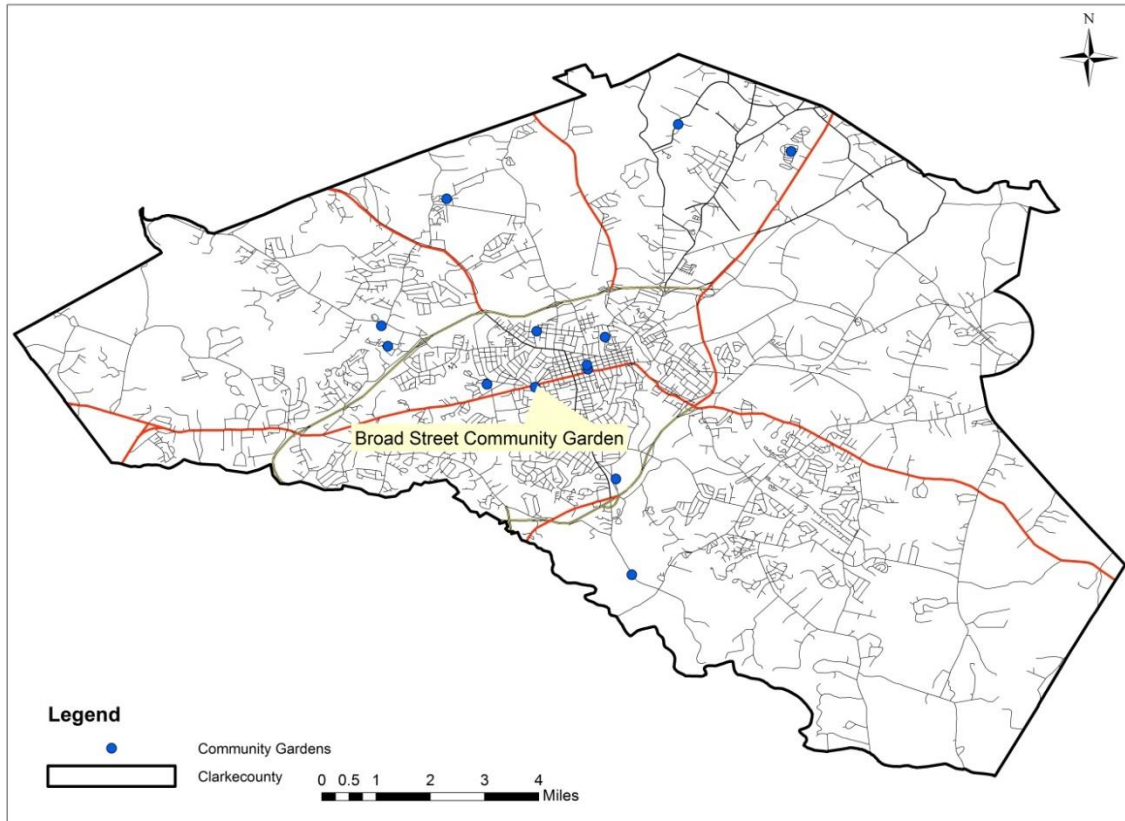


Figure 3-3: Community Gardens in Athens highlighting Broad Street Community Garden. (Data from Taylor S. Logan Ladd, Athens-Clarke County Community Gardens, 2012)

Adding the local farmers markets to garden, supermarket and community garden points I created a food map for Athens Clarke County. Figure 3-5 is a food map for Athens Clarke County, with only home gardens included in the six census block groups surveyed

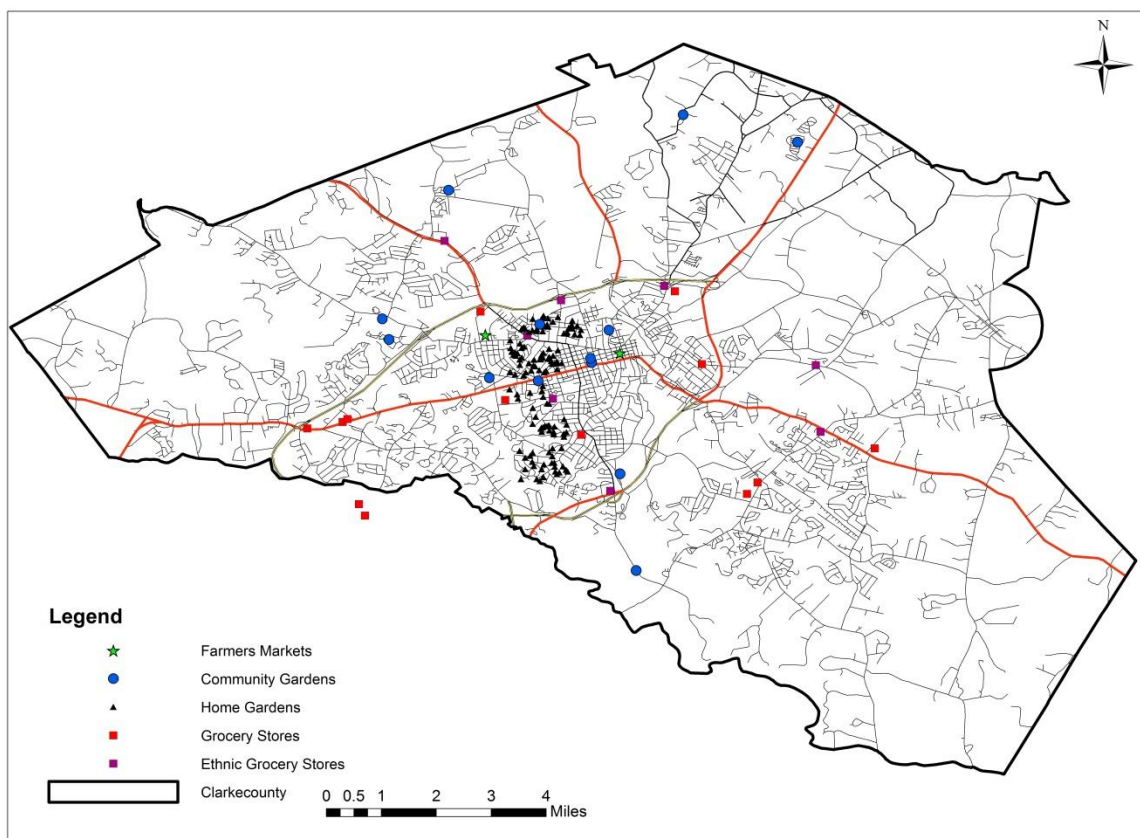


Figure 3-4: Food Map of Athens Clarke County

CONCLUSION

The food landscape of Athens Clarke County is ever evolving. Race and socioeconomics are important factors in not only access to certain features of the food terrain, but also participation in practices of growing your own food. Data from the ERS Food Access Research Atlas shows that much of Athens, and especially the low-income neighborhoods surveyed in this project are food deserts. Besides having less access to fresh food from grocery stores, low-income households less often chose to grow food themselves. Lower income residents face barriers in decisions to produce their own food, and there are fewer households that make this decision. Access to land, knowledge, and information discourage home gardens in low income

neighborhoods. Lack of access to fresh food, whether purchased at a grocery store or grown in the back yard, describes a dismal picture for the dietary health of individuals living in low-income neighborhoods. However, community gardens such as the Broad Street Community Garden offer a place of optimism for access to fresh food in these neighborhoods. The Broad Street Community Garden offers these communities the chance to overcome startup costs and economic barriers to participate in local food production. Initiatives such as this community garden demonstrate the ability of community gardens to challenge socio-economic inequalities in access to gardening and food.

CHAPTER 4

MOTIVATIONS OF URBAN AGRICULTURE: THE PRACTICE OF ECOLOGICAL CITIZENSHIP

Cultural, economic and political motivations have often been at the forefront of gardening campaigns in American history. During World War II under the Food Fights for Freedom campaign citizens were urged to grow food at home to support wartime food export and domestic security (Lawson 2005). These home gardens were called Victory Gardens. The Victory Garden movement during World War II demonstrates that broader cultural movements can be inscribed into the simple act of growing vegetables at home. Victory Gardens bloomed under the motivating factors of American patriotism. This was a significant cultural movement that blended patriotism with personal motivation. It helped citizens contribute to the war effort as well as providing opportunities for local recreation, health, and morale (Lawson 2005). At the end of World War II the USDA reported 20 million families produced 40 percent of the total American vegetable supply (Lawson 2005: 171). The example of Victory Gardens demonstrates that gardening does not happen in a vacuum. Indeed, there are strong cultural politics, ideals and myths that are inscribed into the act of growing food.

Growing food in one's household is a practical engagement with the surrounding environment, but also encompasses significant cultural, political, economic and aesthetic ideals. In terms of practical engagement with nature, most gardens are very similar; they require preparation of soil, planting of seeds, watering, and pulling weeds to ensure a successful crop. However, there is wide variation in the different goals and motivations that inspire people to dig

into a corner of their yard that used to be manicured grass, weeds or dirt and plant food crops in the ground. In Chapter 3 I discussed the importance of socio-economics in decisions to grow food. In this chapter I will report data gathered during interviews with Athens home food gardeners to discuss the many and varied motivations and goals for home gardening. While reporting these findings I will explore the significance of these motivations for gardening, especially in relation to an emerging environmental ethic as represented by the concept of ecological citizenship.

This chapter is based on 44 interviews with individuals who grew food at their houses. Summary statistics for these interviews are presented by block group in Table 4-1. The summary statistics include households, gardens, and interviews in each block group. This table also includes a score of ecological motivation for gardening, as well as percentages of households who compost and participate in gardening outside of the home. These statistics are relevant in terms of gardening practices, which will be discussed later in this chapter. As a part of the interviews I asked individuals to rank different motivations for growing food based on their importance from not important (1) to very important (5). This list of motivations was compiled based on my review of literature, research by the National Gardening Association (National Gardening Association 2009), and pilot interviews with gardeners. During the interviews respondents were asked to elaborate on motivations that they ranked as important or very important, as well as to list any reasons or motivations for their decision to grow food that were not included in the interview list (see Appendix A for interview schedule). Result statistics from this Likert scale activity on garden motivations is presented below in Table 4-2, including motivations, average score and percent of people who listed a motivation as either important (4) or very important (5) in their decision to grow food at their home.

Table 4-1: Summary Statistics for Home Food Gardeners in Athens-Clarke County by Block Group

Block Group	Median HH Income	Pop.	No. Households	No. Gardens (% of HHs)	Gardens per 100 HH	Interviews (% of Gardens)	Score of Ecological Motivation *	% HH who Compost	% Garden Outside Home **
Block Group 1 High Income	\$ 123,063	850	349	24	6.87	6 (25%)	4.11	83	50
Block Group 2 High Income	\$ 79,792	1045	431	25	5.80	7 (28%)	4.10	71	43
Block Group 3 Middle Income	\$ 47,813	1117	573	33	5.76	9 (27%)	4.02	100	55
Block Group 4 Middle Income	\$ 37,817	1577	724	34	4.70	11 (32%)	3.86	70	80
Block Group 5 Low Income	\$ 20,988	1569	440	14	3.18	8 (57%)	3.65	71	57
Block Group 6 Low Income	\$ 16,084	834	379	8	2.11	3 (38%)	4.66	100	33
Total [Avg.]	-	6.992	2,896	138	[4.77]	44 (32%)	[3.93]	[81]	[52]

*Score of Ecological Motivation is the Average Score of Importance (1=low, 5=highest) for motivations that reflect environmental concerns: Knowing where your food comes from and what is in it, Eating locally, Access to fresh food, Growing food organically, Eating seasonally, and gardening because it is good for the environment. These six scores were averaged for each individual, and for all individuals in a block group.

**Gardening outside of the home is defined as anyone who responded that they participated in Community Gardening or worked on gardening projects outside their home with family, friends, or neighbors.

Table 4-2: Reported Motivations of Home Edible Plant Gardeners

Motivation	Avg. Score of Importance (1= lowest, 5= highest)	% Responded important or very important
Access to Fresh Food	4.52	89 %
Know where your food comes from and what is in it	4.34	82 %
Eating Locally	4.11	84 %
Grow food organically	3.84	64 %
Eating Seasonally	3.66	66 %
Good for the environment	3.61	64 %
Participate with family/ friends	3.45	59 %
Looks nice/ pride in home	3.22	45 %
Runs in the family/ connection to Roots/history	3.18	55 %
Monetary Savings	3.16	39 %
Teach family/children about growing food	2.66	39 %
Increased Exercise	2.59	27 %
Grow crops not available in stores	2.27	20 %

These motivations, their importance to different gardeners, and their connection with environmental ethics and alternative food consciousness will be discussed in much more detail below.

THE MOTIVATION OF ECOLOGICAL CITIZENSHIP

In the following section I will present responses and motivations from gardeners in Athens that correspond to an environmentalist ethic approaching the conception of ecological citizenship as proposed by Dobson (2003). While the motivating factors for growing food at home are diverse, I will present two main themes that connect many of the responses of individuals to an increased environmental consciousness. The first theme is philosophical and

will discuss how growing food, and gardening in general, allows individuals to form a bridge between culture and nature and increase their appreciation for nature. The second theme is more practical, and will discuss how growing food in the home is part of a movement toward creating a more local and sustainable food system that embraces ideas of lessening ones ecological footprint and therefore the ideals of ecological citizenship. After presenting these themes I will connect them with the responses of Athens food growers.

Culture Intersects Nature in the Garden

Gardens are clear and obvious places where nature and culture intersect in the everyday lives of people. Gardens are usually considered part of the home, yet these spaces are outside, and often filled with wild and unknown plants, insects, and animals. Gardens have been described as “ambiguous and anomalous category between nature and culture” (Bale 1999: 46). Historically these places, like public parks, have been regarded as ‘improvements’ to nature; these places are attempts to tame or civilize the wild, unruly character of nature (Longhurst 2006). Geographer Robyn Longhurst goes so far as to classify gardens as paradoxical spaces that “sit at the thresholds between dominance and affection, between ascendancy and pleasure” (Longhurst 2006). The significance of these in between places is important for many individuals in how they approach understandings of nature and construct personal identities.

The significance of garden places is echoed by author Richard Mabey, who argues that “our vernacular relationship with nature should be taken every bit as seriously as the folklore of less developed areas” (Mabey 1996:12). Furthermore, many see the garden as a “key locale within which nature and wider environmental issues are debated and understood” (Bhatti and Church 2001). The importance of gardens is their everyday, lived-in reality. For many individuals working in their gardens is the closest they get on a regular basis to interaction with

‘nature’ and the outside world. In this way work in the gardens can bring about lay knowledge, connections to and deeper understandings of nature (Bhatti and Church 2001). Routine practices in the garden connect individuals with the sensory presence of nature, and human relations with nature are built on these everyday interactions (Bhatti and Church 2001). Research in environmental psychology has reasserted many of these claims; a survey of gardeners found that the top two listed benefits for gardening were spending time outdoors, and observing nature and natural processes at work (Clayton 2007). For many people, the garden is the everyday lived-in location where they go to interact with, understand, and build their meanings of nature.

The garden space can also reflect larger economic, social and cultural processes. In the garden individuals are faced with certain ecological dilemmas, ambiguities and opportunities such as how to deal with weeds, engage with certain plants and animals, and treat their soil (Bhatti and Church 2001). These interactions shape understandings of broader processes, which can include for example the widespread use of pesticides and herbicides in conventional agriculture, deforestation, or the protection and management of endangered species and habitats. In the modern world individuals are bombarded with information about environmental risks and threats to nature: global climate change, deforestation, pollution, mad cow disease to name a few. For some, the garden becomes a place where these risks and uncertainties of global environmental threats can be managed and contribute to a certain ecological certainty (Bhatti and Church 2004). For others, in the garden individuals can “develop sensual and personalized connections to nature that whilst contributing to a sense of certainty and order can also heighten the awareness of environmental threats” (Bhatti and Church 2004: 40). While some choose gardening as a way to escape, others approach gardening as the foreground in encountering these issues. These individuals embody their concern over environmental risks and threats in their

gardening practices, such as growing only organically, landscaping with native plants, reducing or eliminating the use of herbicides, composting, and beyond the garden buying locally grown produce. The embodied understanding of nature and associated practices lead into the second theme of practical participation in efforts to support a local and sustainable food system.

Alternative Food Systems

The second trend that connects home food production to an increasing environmental consciousness is the interrelatedness and shared motivations between home food production and a desire for participation in alternative food systems. Despite criticism of alternative food systems, many consumers believe in their environmental, economic and cultural goals for reshaping the way we eat food. Many see home food gardening as complementary to their participation in alternative food systems. There is no need to calculate food miles when eating produce grown in the backyard, it is as local as possible. Many home gardeners choose to grow organically, avoiding pesticides and herbicides. When food comes from the garden, eating produce when it is in season is the only option. These motivations echo many of the goals for creation of an alternative food system, and for individuals growing food at home was complemented by participation in the Farmers Market, local CSAs and pickups from Athens Locally Grown. The two themes of connecting to nature and participating in alternative food systems reflect an environmental awareness and ethics for choosing to grow food in the home. Interview responses that demonstrate how home gardeners conceive of and connect to environmental ethics will be presented in the next section.

Interview respondents often replied that being outside and connecting with nature was an important aspect of their garden. “I just like being outside” was echoed by many of the respondents. For many this was a simple pleasure, and they responded that “it's good to see the

bees out here and the butterflies”. Connection with nature was more personal and spiritual for one respondent who discussed her enjoyment of gardening,

“The most important reason to me to garden is the process - is what it teaches you about life and makes you connected to the earth. And I think that technology is fabulous - I mean I have an iPhone. Technology is awesome, but we are very disconnected from our mother. And so it just teaches you about life. This is my religion. I like to think of the garden as a teacher and the process as learning”.

Her garden is shown in Figure 4-1. While not everyone shared this level of spiritual connection to gardening, many saw working in their garden as a valuable interaction with nature.



Figure 4-1: Garden of a woman who reported a spiritual connection to her garden. “I just dig it”

While many expressed a connection with nature in the garden, the highest motivation for gardening were having access to fresh food and knowing where your food came from and what was in it (see Table 4-1). Many of the responses that focused on these aspects stressed the

practical nature of their garden and produce. “I cook a lot and I like fresh ingredients and it just tastes better.” I was informed again and again that homegrown tomatoes, peppers and herbs just tasted better and were fresher than other options available to people. Nearly 90 % of respondents listed access to fresh food as important or very important in their decision to grow food. Each gardener grew an average of 53.6 plants per year. The most commonly grown plants are tomatoes, peppers, and squash but also include okra, eggplant, cucumber, zucchini, pumpkins, potatoes, watermelon, basil, blueberries, and raspberries.

Having access to fresh food was correlated in responses with knowing where your food came from and what was in it (Pearson correlation coefficient $r=0.4987$, $p = .0006$). While many respondents did this for the simple reason of taste, for others these two aspects reflected their own concerns about the food system. “You go to a local grocery store and nearly have no idea where things are from and what pesticides are put on them.” Knowledge and concern about how food is grown encourage people who wished to know more about their food. Often, this knowledge played a big part in people’s decisions, such as this young father who when asked why access to fresh food was so important said, “I read things coming out – it’s not necessarily established - I’m reading more about how some pesticides might be linked to ADHD. Even though it’s not established. If we had something that we can grow that would be good for them, it would rule that out. And you know what’s in your food. You seem more confident that there are no risks, and you get more and nutrition.” His garden is shown in Figure 4-2. An older gardener responded similarly when asked why access to fresh food was important, “There has been a lot in the press, a lot of books published about the food industry, Michael Pollan stuff in particular that suggests that the food industry is to be suspect. I believe that's true in many many cases. We are driven to buy food and get food that we know its source”

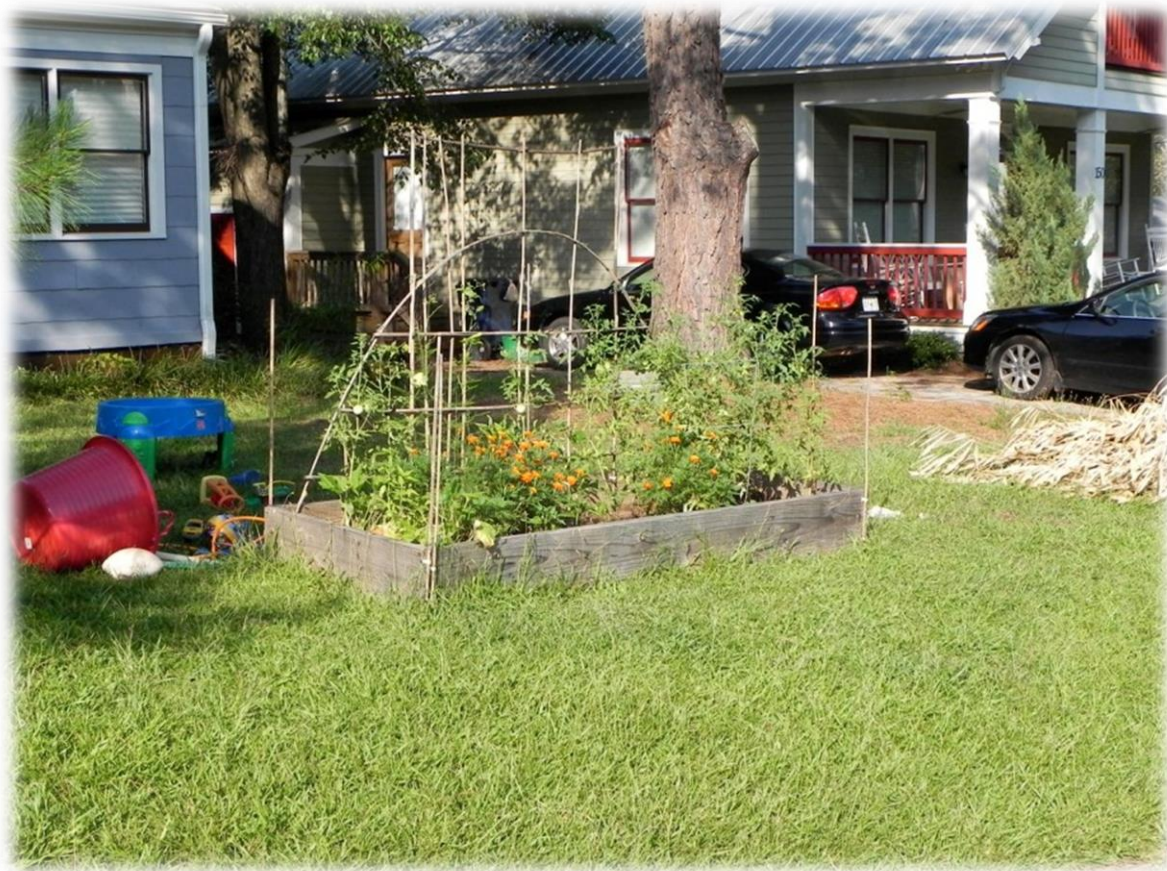


Figure 4-2: Garden of a father who was concerned about the health of food for his children. Increased knowledge about how food is grown, where it came from, and how it was transported to local groceries often caused concern among local gardeners, and being able to grow food in their yard gave them piece of mind. One gardener, whose garden is shown in Figure 4-3, summed this up,

“I think as the media covered more and more growing conditions of food. I mean, first we had the living conditions of animals. One show they are showing organic herbs being processed in China, and someone was taking a fork lift and driving over it. So the heat from the fumes were used to dry the herbs, and then packaged and sold as organic. I thought no no, that sounds awful. When you garden, you know what’s in it and you know what has and hasn’t been sprayed on it and you know it hasn’t taken a lot of gasoline to get it here. You feel safe eating it. You really do.”

Eating locally was another major concern for home food gardeners in Athens, with 84 % responding that this issue was important or very important to them in their decision to grow food. Responses to the importance of this issue focused on two aspects; avoiding long distance transportation of food, and encouraging local farmers and communities. The food miles of many of the common grocery store products bothered a number of respondents, one of whom replied “I do want to know where it comes from. I don’t want it to have the other environmental impacts of transporting foods across the country and across the world. Especially ones that we can grow right here. Peaches from somewhere else, doesn’t make a whole lot of sense to us. And you know, it’s an economic thing too. We’ve got local people in the same business.” The environmental aspect of eating local was important, with one respondent discussing her reasons for participating in alternative food “Mostly for the local -- in lowering your carbon footprint.” For others eating locally was more about supporting their communities, “We just want to support the people that live and work around us. We want to support people who grow food well-meaning in ways that are safe for the environment and safe for people. We don’t want the chemicals for the people or for our earth”. Many who were concerned with eating locally supplemented their own garden’s produce with trips to the Bishop Park Farmer’s Market, Athens Locally Grown or by joining a local CSA.

Growing food organically was among the top reasons people chose to grow food at their homes. Again, this reason reflected both suspicions of food found in grocery stores and an environmental ethic to getting food. One respondent was particularly concerned with pesticides in food, “I don’t think we have nearly enough regulation over chemicals. And so grown organically is less dangerous for the people working and for the people eating. I think the organic methods are a lot better for everyone.” The health concerns of non-organic food were major

concerns for many, including one home gardener who worked as a nurse who replied, “All that [points at her garden] is organic - no pesticides and no fertilizer. I am a nurse, and I run the free clinic here in town, and I see obesity - not only obesity but people who are eating too much pre-processed foods. They don't know what chemicals they're getting into their systems. We're not sure how much of the hormones you see in chicken or beef and pork are actually impacting cancer and other illnesses. So, I like to do whatever is possible, either grow my own or buy it from the local organic farms.” For others, growing food organically was a matter of cost as one person replied, “It is nice to grow food organically because I can't always afford it at the grocery store”.

Many gardeners were skeptical of the organic food movement, such as one young graduate student who replied, “I appreciate the organic movement, but I'm not obsessed with it. A lot of it is all talk, and it's not really any better.” While some were skeptical, others had intentions to grow organically but started using chemical applications when something in their garden went wrong. For one elderly gentleman the success of his tomatoes came above all else, and he replied, “Actually the past couple of summers I've used fertilizer on the tomatoes. Because I wanted to make sure they kept growing.” Pest problems often caused food growers to reconsider their organic aspirations, such as one respondent who replied, “I tried to be close to it. Not an absolute. If something is really getting on something else then I will use pesticides, but I try to use all organic fertilizers and stuff like that. But that doesn't mean I won't ever use another option.” While many aspired to the ideal of growing organically, the practical nature of producing good vegetables superseded these ideals.



Figure 4-3: Garden of a woman who liked to know where her food came from

For some individuals interviewed in this project the environmental impacts of having a home food garden were described in comparison with the alternative – the American turf grass lawn. One respondent described her desire to grow food in comparison with growing a lawn,

“I’m very against lawns. It’s just green. It’s like Bermuda grass. Like putter green grass. You can tell that they have to put a lot of chemicals on it to keep it that way. It’s got the little flag in it, ‘watch out, don’t enjoy this lawn because it’s full of chemicals. And you have to water it constantly. It feels like an ecological nightmare. I’d rather grow something that has some flowers. I’d rather grow a lot of different things.”

Many of the gardens surveyed in this project grew in places that were previously occupied by turf grass lawns. While lawns may not be the “ecological nightmare” as described by the previous gardener, there are numerous environmental impacts involved in owning and maintaining a lawn. Lawn care relies heavily on chemical fertilizers, pesticides, and water to fulfill our cultural ideal of a soft, carpet-like always green turf monoculture. It is estimated that 50,000 square miles of the United States is covered in lawn (Lindsey 2005). More area is covered by lawns than by corn in the United States, making grass the most irrigated crop. Lawn care involves the use of chemical pesticides, and in 2007 more than 78 million pounds of pesticides were applied to lawns and gardens (Fischel 2011). Lawns use a large amount of water, and it is estimated that 50-70% of residential water usage is spent on landscaping and watering the lawn (National Wildlife Federation).

Despite the considerable amount of labor, chemicals, and water needed to maintain an aesthetically pleasing lawn it remains the normative landscape in the United States, so much that they are described as the landscape hegemony (Robbins 2007). The people in this project who have gardens instead of lawns chose against all the chemicals and water needed to maintain a lawn, but also choose to go against the normative landscape. Duncan and Duncan (1998) suggest that, “it can be argued that one of the most important roles that landscape plays in the social process is ideological, supporting a set of ideas and values, unquestioned assumptions about the way a society is, or should be organized” (Duncan and Duncan 1998: 117). Lawn ideology is a powerful force of identity, by representing democracy, community, and strong moral character (Feagan and Ripmeester 2001). This ideology is so powerful that those who choose alternatives are looked down on in communities, and often criminalized. The ideology is institutionalized, and across the country lawns, ordinances, homeowner contracts, and neighborhood regulation

enforce the lawn care aesthetic. Recognizing the ideological importance of the lawn brings into focus the ideological importance of alternatives, such as the decision to grow food and vegetables in one's household. For the gardeners in Athens, choosing a garden instead of a lawn expressed an ideology of environmental ethics. The responses of gardeners echoed this environmental ethic.

The top reasons people choose to have a garden – access to fresh food, to know where food came from and what was in it, to eat locally and organically, were motivations connected to the two themes of connecting to nature and participating in an alternative food system. These motivations highlight environmental concerns people have about the conventional, global food system. When respondents were asked if they grew food because it was good for the environment, these concerns often came to the forefront. One respondent replied, “Each of us has a responsibility toward the environment. So I am always cognizant of the effects of what I do and what effects they have on the environment. By growing food organically I feel like I am being a good steward of the environment.” A number of gardeners mentioned that they hoped their home food production would help them have a lower carbon footprint. While these concerns were true for many people, many others saw any beneficial environmental outcomes of their garden as an “added bonus” to their main motivations of having access to fresh food. Others considered their food gardens as too small to have any real environmental impact, or wondered if “It might be better for the environment to leave the wild grass growing.”

Responses from local food gardeners in Athens demonstrate the environmental ethics built both through a connection to nature, and demonstrated in home gardening and participation in an alternative food system. While responses varied widely, many aligned with the view of ecological citizenship as promoted by Dobson (2003). The widespread desire to lower fossil fuel

usage through local consumption, reduce carbon and ecological footprints, and personal responsibility dovetail with an ecological citizenship built upon equitable ecological footprints. These desires and motivations were enacted and embodied in garden and food practices that merge political environmental ethics with daily life practices. In this manner home food gardening is an expression of ecological citizenship alongside other examples of ecological citizenship such as participation in local organic food networks (Seyfang 2006), participation in green social economies (Smith 2005) and the creation of green spaces (Horton 2006).

At this point, it is worth asking if urban and suburban home gardening has positive environmental outcomes. While the research into this question is scant, there have been some studies on the sustainability of home gardening from Australia (Ghosh and Vale 2008, Ghosh 2011) and England (Loram et al. 2008). While the impact of urban and suburban depends upon a multitude of factors including size of the garden, local ecology and water resources, residential patterns, and food demands, those researchers seem optimistic about the potential for sustainable outcomes. Ghosh (2011) suggests that “vegetable patches in suburban home gardens generate an informal, alternative, environmentally sustainable food resource. As potential sites of local production, home gardens could lower the carbon footprint, improve public health, and promote better social cohesion”. Gardens have also been identified as important sites of water and energy conservation, onsite waste composting, agro-biodiversity, carbon sequestration and storage by tree canopy cover and native vegetation restoration (Loram et al. 2008, Ghosh 2011). However, these benefits are difficult to measure and differ on a site-by-site basis. Capacity to grow food varies with climate, rainfall patterns, soil characteristics and motivations of each gardener. Composting is highlighted as an important activity for reducing waste in landfill sites and consequent methane generation (Ghosh 2011). However, home water usage in both lawn and

gardening activities is highlighted as a potential site of abuse and unsustainable activity. Again, this is all context dependent; it might not be sustainable to grow vegetables in the desert of Las Vegas.

ECONOMIC, CULTURAL AND AESTHETIC MOTIVATIONS

The reasons why gardeners choose to grow food at their home vary from individual to individual. The focus of this research project is the environmental ethics involved in choosing to garden, but often inspirations for creating a food garden come from other sources. I will examine a number of these, beginning with the idea that gardening saves money.

Gardening to Save Money

The average American adult consumer spent \$6,458 on food in the year 2011 (Bureau of Labor Statistics, Consumer Expenditures 2011). Food purchases are a significant amount of money for many individuals and households. Especially following the 2008 US recession, food gardening has been suggested as a viable way to reduce food expenditures. Magazine articles, newspapers and Internet websites all champion food gardens as a way for households to lessen their grocery bills. Interview results also suggest that this is a significant motivation for some people who choose to dig into their yard. While having a low score of importance in comparison with other reasons, nearly 40% of individuals responded that monetary saving was important or very important to them in their decision to have a garden. This was especially true in the low income areas surveyed for this project. There was a correlation between living in a low income neighborhoods and ranking monetary savings higher as a significant reason for having a garden (Pearson correlation coefficient $r=0.3408$, $p=.0236$).

Responses during interviews with home gardeners confirm that saving money is a significant reason for growing food. One respondent in a low income neighborhood summed up

his experience, “Every little bit helps. For the last few weeks, I've eaten so many meals of just tomatoes and okra. It's so prolific. I'm starting to get tired of it. I don't have to buy anything.” The impressive garden of this frugal individual is shown in Figure 4-4. For another respondent with young children, the food spending involved in feeding growing kids spurred his interest in growing food as he realized that “One of the things about having a family and looking at our budget, is how much money we spend on food. Think it would be cool to work to a point of actually growing a lot of our food.” For others that were interviewed, growing food became a way to save money when compared with the prices for produce at other organic options in town such as the Farmer’s Market, Earth fare or Athens Locally Grown, as one respondent suggested, “As much as I love farmers markets, I can't really afford them always.” Another compared vegetables grown at home versus the other option, which, “are very expensive, especially when you get them at the co-op or Earth Fare or the farmers market. That stuff can be kind of pricey. And it's so easy to grow at home.” Many of the more experienced gardeners echoed this sentiment, with one suggesting, “it makes me mad to go to the grocery store and pay \$2.50 per pound of tomatoes. And the fact that I can do it for myself for free.” A number of gardeners suggested that the sole reason they began their gardens was to save money.



Figure 4-4: Home gardener whose meals of tomatoes and okra had saved him money

However, many home gardeners were skeptical of the ideal that growing your own food saved money. Some saw this as a future goal, replying that saving money “is what we are working towards” while others recognized that their small garden plots didn’t make much of an impact when compared with their total food intake, replying “We still buy a lot of our food from the stores. [Maybe] If we did this on a large scale”. Others were more neutral on the prospect of saving money, saying “And it seems cost effective, but I don’t know if it actually is. Especially if you consider that not much has yielded” or realizing that “I think you end up spending about as much as you would”. Many others responded quite negatively, noting that “at this point, I feel

like I'm spending more than end up eating” and one women laughed at my question and responded, “That’s bullshit. If you garden you spend a ton of money. Unless you're on a farm and you have natural cow manure that you can use”. For many, gardening was not cost effective and instead grew food for other reasons.

At this point it is worth considering the questions, does gardening save money? And if so, how much? This certainly differs on a case by case basis as each home garden will vary in soil characteristics, climate, pests and weeds and depending on what is planted and each gardener will have different amounts of knowledge and commitment. To provide an answer to this question, I searched through websites for individuals that had kept an accurate financial reporting of their yearly garden expenditures and crop production. I found nine sources (4 websites and 5 scholarly articles) that reported results from a season of gardening (see Appendix D for a list of these sources). Of these results, all reported net profit for their gardens. These profits ranged from \$7 for a small herb garden, to \$2149 profit for committed, season round gardeners in Maine. The average net profit for a garden was \$517. This number is in complete concordance with the results of 2009 survey of 2,500 households by the National Gardening Association. The results of this survey were an annual \$70 garden investment and an estimated \$600 return in fruits and vegetables, for a net profit of \$530 (National Gardening Association 2009). The majority (all except 1) of these sources does not include the cost of labor involved in gardening and these sources certainly contain a significant amount of bias, often with the intent of encouraging growth in gardening industry. However, the concordance of internet sources, scholarly articles and large scale surveys indicate that gardening can be a significant source of monetary savings, especially for those with access to land and horticultural knowledge.

Gardening to Connect to Roots, History, and Memories

Gardens, and the food they produce, are often very visceral and sensory objects. The way a homegrown tomato tastes, or the look of neat rows of okra are powerful experiences that often connect people to histories and memories of gardens past. For many of the home gardeners interviewed in this study, history, roots and remembered gardens and vegetables were an important aspect in their decision to grow food at their homes. Many talked of their memories with gardening while growing up, “My grandparents - both of them had huge gardens. My grandfather had a farm and would grow all types of vegetables and sell them on the side of the road”. This view was repeated by many of those interviewed, and many saw themselves as following in their footsteps, or as one respondent put it, “my grandfather always did that. And I grew up with him doing it and now he's gone. So I carry on the family tradition.” For others it connected them to their immigrant forbearers, such as one respondent who told me “My grandfather was a farmer in Lithuania and my father started a garden in Georgia when we were children” Another said, “My family is historically a big farming family in northern Alabama. So it's kind of been in my past. I spent summers helping my grandfather farm. It's something I feel like I just have to do every spring or summer. It's almost genetic. It's hardwired in there somewhere.” His garden is pictured in Figure 4-5. For these individuals growing food was an important part of their childhood and early interaction with nature.



Figure 4-5: Garden of a man that claimed growing crops was hardwired into his genetic make-up

Gardening is an act that is filled with sensory information; the stickiness of picking okra off the plant, the texture of newly tilled brown soil, the sight of squash flowers in full bloom and the taste of a fresh off-the-vine tomato. Strong sensory information such as these are often significant in connecting individuals to memories and historical identities (Nazarea 2005). Nadia Seremetakis describes picking greens in her native Greece, but the description can also be applied to any gardener who has a sudden sensory memory of past gardens when she writes, “an entire past sensory landscape was translated into a present act; and in the course of doing so, one sense educated and enculturated the other” (Seremetakis 1994: 116). Food has been increasingly recognized as a sensory experience, wherein the eating of certain things brings forward a ‘food

past' that embodies historical consciousness that inform personal and group identity (Sutton 2001). This embodiment of sensory experience comes to life when a respondent told me, "tomatoes today don't taste as good as when I was a kid". The taste of a home grown tomato brings forth past memories and intermingle them with current experiences. The senses of gardens are not the only connections with historical experiences; the garden itself can be a place of significant emotion and memory. Gardens are often not locations, but instead places - crucial to the experience of everyday lives, human situations, and meanings (Relph 1976). Human experiences, and the ability to touch, see, smell and move through these locations fill them with emotion, impressions, values and memories (Tuan 1979). It is this deep connection to the garden as place that motivates many individuals to recreate these sensory experiences, and for some this connection is "something I feel like I just have to do every spring or summer". The importance of memory in connection to places and sensory experiences is a significant reason 55 percent of individuals cited this as an important or very important motivating factor for growing food. Memory of gardens past is often connected with important understandings of nature and culture, and the role of food production and consumption in everyday modern lives in connection with wider environmental understandings, which will be addressed in the next section.

GARDENING PRACTICES

Practices form an integral part of maintaining a functioning food garden. Gardens require practices; the ground must be dug, raised beds must be built, and the seasonal cycle of planting, weeding and harvesting all require effort and labor of a skilled and motivated body. Beyond the basic installation and maintenance of a garden, the practices of an ecologically concerned gardener expand into new forms and arenas. Gardening encourages the creation of a compost pile, and organic food waste will go into the backyard instead of the garbage can. Successful

food gardens encourage practitioners to expand their gardens and construct raised beds, rain barrel irrigation systems, and fencing and trellising. Beyond the individuals' yard, gardening practices expand into neighborhoods and communities. Once someone appreciates the hard work, timing, expertise, and beauty that a garden offers they share knowledge, information and strategies. Neighbors stop and chat about what they are growing and how successful it is. Gardening as a common pursuit unites friends, families and neighbors. Beyond loose affiliations of gardeners, more formal organizations emerge. These take the form of garden clubs and community gardens. Practices unite desires for fresh produce and concern over environmental issues with everyday experience and activity. Practices unite individuals into communities of practice, whereby collective learning and behavior create shared dispositions and sensibilities about how to approach the world (Wenger 1998). For home food gardeners in Athens, practices inscribe an environmental consciousness onto the landscape.

Table 4-3 summarizes the practices of home food gardeners in Athens. In addition to these statistics, gardeners reported that they tended to their gardens on average 3.8 days every week. Clearly, gardening is a significant activity for those that engage in home food production. A large portion of home food gardeners (95%) had built or constructed something to help in their garden. This often included compost bins, raised beds, trellises, or fences to keep out pests. All of the gardeners in my survey planted their crops themselves, and a significant number (81%) of them composted food scraps to turn into soil for their garden. More than half had assistance from other members of their households in maintaining their gardens. Significantly, none of the gardeners in my survey used any type of landscaping service or outside help in creating and maintaining their gardens. A quarter (24%) participated in GA extension agent activities. These

activities include the Master Gardener program (3 Master Gardeners), attending workshops on gardening, or sending in soil samples to the extension agency.

Table 4-3: Summary of Food Gardener's Practices

Practice	Individuals	% of Gardeners (out of 42*)
Plant crops yourself	42	100%
Discuss gardening with neighbors, family, and friends	41	98%
Built/constructed something to aid in gardening	40	95%
Compost	34	81%
Share seeds or plants	33	79%
Gardens with assistance from household	23	55%
Work on gardening projects with neighbors, family, and friends (outside of home)	22	52%
Participate in community gardening	11	26%
Participate in GA extension agent activities	10	24%

*44 interviews were conducted. 2 of these interviews were separate individuals in the same household, which are only counted once in this table.

Participating With Family, Friends, and Neighbors

Growing food at home is rarely a solitary activity. Neighbors, family and friends participate in this social practice, and they become significant for learning, meaning and identity (Wenger 1998). Below the six motivations associated with environmental ethics, the highest ranked motivation for gardening was participating with family, friends, and neighbors. 59% cited participation with family, friends or neighbors as important or very important in their decision to

garden. Further, 55% of gardeners had assistance in their garden from other members of their household. Every gardener except one (95%) responded that they discussed gardening with neighbors, family or friends. These discussions ranged from how to deal with roaming pests such as squirrels and deer, to what and when to grow and how to maintain an organic garden in the face of the many challenges of a Georgia summer. 79% percent of gardeners shared more than just knowledge and techniques, but actual seeds or plants with those in their communities.

The social nature of gardening was expressed during many interviews. One gardener responded, “Once you are working in the garden people stop by and they bring you seeds. And ask you what you’re growing there. This community has a lot of gardeners, and we ended up being a part of this community of gardeners. It’s a great added benefit.” Many gardeners echoed this sentiment, with some describing the sociality of gardening as “I like to grow it and I like to share it with my friends” while others described it as an “added benefit”. Others had mixed feelings about the social nature of the garden, with one gardener responding, “The only participation is giving most of the stuff away. My children are not into gardening. They’ll occasionally help me weed. And they’ll pick it, and help me eat it. Sort of like the old red hen.” Figure 4-6 is a picture from a garden where neighbors and friends share seeds, plants, labor and produce between them.

Informal communities form around the common interest of producing food at home. Knowledge, techniques and fresh produce are shared between neighbors, families and groups of friends. There are also more formal communities that form around the shared interest in food gardening. Gardening clubs and community gardens are formal communities of practice formed by interested and committed practitioners. A number of these organizations were often mentioned in interviews, especially the Boulevard garden club and the Boulevard Community



Figure 4-6: Garden in a neighborhood where labor, seeds, and produce were shared. A founding member of the Boulevard garden club explained that interacting with neighbors and friends was a large motivation for starting the group. Another member explains the role of the Boulevard garden club, “I’m in a gardening club, the Boulevard gardening club. They are really nice and don’t make you live on Boulevard. They are awesome. We have good meetings. We talk about when I am starting seeds. And complain if things don’t grow. Usually seed starting stuff. I have access to stuff. I’ll take it to people’s houses and trade.”

Participation in community gardening was diverse and enthusiastic. While only one quarter (26%) of respondents worked at a community garden, the gardens and activities varied. Gardens where people volunteered include: Broad Street Community Garden, Boulevard Community Garden, Pope Street Community Garden, Clarke Middle School, and UGarden, as

well as the Athens Land Trust. Those who worked in community gardens were enthusiastic about social food growing, with one responding, “wow this is such a cool thing to bring the community together”. I interviewed a couple, and when asked about participation in community gardening the man admitted to ulterior motives, “Yes, that’s where we met. I started it the Boulevard one in the hopes of meeting someone. And it worked.” The role of informal and formal communities of practices formed around gardening demonstrates its importance in fostering learning, meaning, and identity. These communities of practice create shared dispositions and sensibilities that influence how participants approach food, local landscapes, and the environment.

OTHER MOTIVATIONS

Gardening as exercise did not rank high among the list of motivations for gardening, but was significant for a number of respondents. One gardener summed up her feelings about gardening as exercise, “I find myself escaping everything. And I can work for hours when the weather is nice when it's not so hot like this. In the fall and early spring. I spend hours out there. I don't say I go out there for exercise. However, I worry about exercise, and I justified that I've been out there as a substitute for my exercise.” Another gardener responded, “Someone asked me how I’m so fit. I said aerobic gardening.” While the majority of gardeners interviewed did not mention exercise as a particularly strong motivation for growing food, gardening is shown to have many health benefits. Gardening is described as having the benefits of “improved access to food, improved nutrition, increased physical activity and improved mental health” (Wakefield et al. 2007: 92). Gardening offers numerous physical and mental health benefits for older adults (Austin et al. 2006). Horticultural therapy is a branch of therapy where gardening programs are designed to improve physical, mental and social health of individuals (Straus 1998). While these

benefits were not so obvious to participants in my research study, gardening provides significant physical as well as mental benefits.

Gardening to teach family and children was important or very important to 39% of respondents in this survey. This number is on the lower end of motivations for home gardeners (See Table 4-1). However, this motivation was very significant for many household with young children. A number of respondents were clear that teaching their children about growing food was one of the most important motivations for establishing the garden. One mother who was interviewed responded, “We started growing food because we realized our children had no idea where food came from. They thought food just came from the grocery store. Get some food. It kind of made me sad. I want them to know where food comes from, and I don't know anything about gardening and ours is kind of sad. I wanted them to have the experience of food coming from the earth and just learning about the process of that - us learning together.” Figure 4-7 shows this small teaching garden.



Figure 4-7: Small garden for teaching children about where food comes from

A number of home gardeners expressed the desire to teach children about where food comes from, and this was not limited to household with young children. One mother responded, “I do like the idea of showing the kids where their food comes from. The first time I grew watermelons, my son is 18 now - he says - oh lets grow watermelons. So we bought a plant, and it was very exciting to come home and see watermelons growing.” While many household in my survey did not have children, for household with children teaching them about food was an important motivation.

Gardening is shown to have numerous benefits for children. Klemmer et al. (2005) show that adding gardening activities to the science curriculum of third, fourth and fifth grade students increased scores on science achievement tests as compared to a control group. Hermann et al. (2006) demonstrate that after school gardening in elementary school children improved both vegetable intake and physical activity. Waliczek and Zajicek (1999) found that elementary school gardening activities significantly improved students’ environmental attitudes. These authors suggest that, “increased knowledge fosters environmental concern in student from elementary school age to college age” (Waliczek and Zajicek 1999: 182). In a literature review of school gardening programs, Dorothy Blair (2009) outlines a number of reported benefits of school gardens. She finds that school gardens broaden children’s experience of ecosystem complexity, contribute to place based learning of nature and culture, teaches food systems ecology, and shapes adult attitudes and environmental values. These studies demonstrate the wide reaching benefits of school gardening. Not only does school gardening improve science test scores, diets and physical activity. School gardens expose children to the outdoors, and ecology in action. These gardens connect students with their local ecology and local food. Through these experiences children and young adults develop and environmental awareness and ethic. Home

gardeners in Athens who teach their children about science, nature and the environment through growing food are teaching their children the practices and morals of environmentally conscious ecological citizens.

CONCLUSION

Motivations for growing food at home varied for each individual interviewed. However, a number of common themes emerged. People like having access to fresh food, to know how their food was grown, and so they can eat organically, locally, and seasonally. These motivations demonstrate how home food gardening is an embodied practice of environmentally motivated citizens. The participants in this research project expressed reservations about the global industrial food system; they are worried about pesticide use, and the fossil fuels used to transport food from around the world. By gardening, they are taking food matters into their own hands and front yards. It is through practices that these motivations are enacted and embodied. Practices allow individuals to engage in their own food production, while remaking nature and the landscape the space around their households. It is also through social practices that skills, knowledge, and motivations are shared between neighbors, family, friends, and the larger community. Social practices encourage the sharing of knowledge about gardening, as well as dispositions that shape how individuals encounter economic, food, and environmental issues.

CHAPTER 5

CONCLUSION: ALTERNATIVES, REALITIES, AND EMPOWERMENT IN THE HOME GARDEN

I have argued that home gardening embodies deeper political, cultural, and economic rationales that are informed by an environmental ethic. To conclude this project, I will examine food gardens within the larger framework of American landscapes and foodscapes. To examine this framework it is worth asking the following questions: within what type of framework do gardens emerge? And is this a meaningful site of environmental minded action? To answer these questions, in this chapter I will examine gardening's place as an upper middle class hobby grounded in consumption and the big box corporate gardening center. Then, I will argue that gardening is a significant practice of environmentally conscious citizens who view the role of the garden as empowering within a landscape of risk, uncertainty, and cultural hegemonies of food practices. Then I will discuss how the results from this research project answer the research questions. Finally, I will discuss the limitation of this research project as well as avenues for future research into home gardening.

GARDENING AS MIDDLE CLASS IDENTITY CONSUMPTION

I have argued that growing food is a significant and meaningful practice for home gardeners to enact and embody environmental ethics. Further, I have suggested that beyond representing an ideology, gardening can in actuality lower the metabolic carbon footprint of concerned ecological citizens. However, it is worth examining counter claims to my assertions. Is gardening merely a middle class hobby? Are gardening practices rooted in creating an identity

through the consumption of nonrenewable goods and services? Is this another instance of “greenwashing”, where the environmental concerns of individuals are played against them to encourage consumption in the garden center and lawn and garden industry?

These questions echo concerns surrounding many practices of green consumption. There is a strong fear that messages of “sustainability” and “green citizenship” will be co-opted by large corporations as a form of greenwashing, where products are only superficially made to appear environmentally beneficial and the deeper structures of unsustainable production and distribution are not questioned or challenged (Barry 2006). These concerns apply equally as valid to the garden. The growth of home food gardening is accompanied by the growth of the garden center. Garden centers are large and corporate, with Home Depot and Lowe’s the go to place for garden needs. Often the garden products marketed at these large Garden Centers are made by the same companies that sell large amounts of chemical pesticides and fertilizers. The commodification around the garden mirrors that of the green front lawn, whereby companies sell a landscape ideology. This has been pointed out most often for containerized gardens, with some suggesting that “ mass production of containerized garden products is designed to meet the desire for instant gratification in the garden and has created environmentally harmful practices amongst producers and consumers” (Bhatti and Church 2001: 371). While Bhatti and Church (2001) write positively about the garden as everyday experience of nature, they warn that gardens can become “a particular form of pre-packaged nature commodified by the garden industry” (2001: 373).

Geographer Lindsay Naylor (2012) argues that home food gardens are not inherently transgressive and resistant, in contrast to what many proponents argue. Naylor focuses on “hired gardens”, which are home landscape businesses that install and maintain food gardens for customers. Naylor argues that access to these services is heavily class based, and in concordance

with much of the critique of the alternative food movement she notes that “resisting the industrial-capitalist food system ... is a luxury” for those who can afford access to grocery stores and farmers markets, or who own land and can afford to hire a service to grow vegetables for them (Naylor 2012: 489). Naylor continues by noting that these services are advertised in newspaper leisure sections, an act which “squarely places these businesses as services for an elite minority, falling cleanly into critiques of alternative food practices, which cater to a relatively wealthy and white population” (Naylor 2012: 492). Further, Naylor suggests that by placing these gardens in backyards and maintaining a consumer – producer relationship, these gardens do not transgress, but in fact serve to reinforce the hegemony of lawn landscapes and the commodification of food. Naylor concludes that “through actions such as these, local food movements and alternative food resources become increasingly fetishized, commodified and exclusionary” (Naylor 2012: 484).

Hired garden companies are not the only ones who have capitalized on images and desires of home food production. The gardening industry is a multi-billion dollar a year industry that, similar to the lawn care industry, carefully cultivates the image of the home gardener. Companies like Scotts Miracle Gro® and Burpee® are heavily invested in creating and sustaining gardening interest. Beyond the garden industry there are dozens of magazines that focus on the home garden. These magazines highlight immaculate, weed free and always green gardens, and between the pictures of perfect gardens are advertisements for the pesticides, herbicides, and equipment necessary to maintain them.

These magazines sell an image of the gardener while using fetishized, immaculate home gardens. For example, the beautiful, clean produce in Figure 5-1 demonstrates all of the amazing vegetables that can be produced in the home garden. The imagined gardener incorporates ideals

of a love of nature and an organized and hardworking household. However, the parallels between immaculate home gardens and immaculate monoculture lawns are striking. The commodification of the garden becomes similar to that described by Robbin's "turf grass subjects", whereby gardeners enter networks of people, gardens, and the garden industry, creating "garden subjects".

While the gardening industry advocates increased connection with nature and espouses many environmental goals, the actual impacts of gardening on environmental goals remain unstudied. Whether gardening results in less chemical pesticide and herbicide use, less water use, and less energy use than the typical American lawn (or even a patch of wildflowers) remains relatively unstudied and highly variable by location. In addition, the effect that growing some of



Figure 5.1: Garden magazines sell the image of perfect produce

your own produce has on the global food marketplace and agribusiness is unknown. Critics of the alternative food movement, such as James McWilliams (2009), suggest that environmental concern placed upon local and organic as misplaced. McWilliams suggests that there are

alternatives that have a clear environmental benefit which are not so visibly championed by environmental conscious alternative food proponents. McWilliams argues that environmentally conscious food consumers should focus on eating vegetarian diets, and when consuming meat to choose aquaculturally grown fish. McWilliams stresses that meat production is a leading factor in global air pollution, water pollution, and land degradation (McWilliams 2009). Further, McWilliams advocates aquaculture as an environmentally sustainable alternative to feed protein to the burgeoning world population. However, these solutions are unpopular – they often require a personal change in eating habits, and are less visible than suggestions of “eating locally”. These critiques demonstrate that the terrain of home food production lacks easy description, and the meaning, goals, and impacts of home gardening are debated.

LANDSCAPE EMPOWERMENT

Large scale, global environmental risk and uncertainty can cause anxiety, with individuals unsure of how to act in a meaningful way to confront these challenges and demonstrate environmental concerns. In the modern world individuals are bombarded with information about environmental risks and threats to nature: global climate change, deforestation, pollution, and mad cow disease to name a few. Buying green products, donating to environmental organization, or volunteering for trash clean up at the local park all become ways of expressing concern over environmental risks. The garden can also become a site where environmental risk and uncertainty are confronted. Gardening is not necessarily predicated upon consumption. For example, in my survey no gardeners relied upon external landscaping groups for their gardens, and most participated in garden practices that did not involve consumption such as saving and trading seeds, the use of rain water cisterns, and the creation of compost in lieu of buying soil. Further, the garden is a personal space for many participants, tied into

identity and the personal sphere of home life. For these reasons, gardening is an activity that can empower participants in confronting environmental risk and uncertainty.

The idea of gardening as empowerment was significant to one particular participant in this study, the owner of a local landscaping company that focused on the installation of vegetable gardens and edible landscape. The owner described the role of empowerment, “I came to [landscaping company] wanting to help people grow food. But the more that I have been doing it, the deepest satisfaction that I get from my job is not seeing people growing food, but seeing people feeling confident, and competent and capable of doing things in their outdoor landscape.” This owner had years of experience working with individuals in households who turned to his service to create food gardens in their homes, and he described changes to these individuals as the result of their gardens. The owner described environmentalism as an important motivation for clients, and suggested that landscape empowerment led to further environmental concern, “and the ripple effects of teaching ecology will go off into their thinking. Like, ‘I won’t spray this on my vegetable garden, so why would I spray it on my lawn? What am I putting down my sink?’” As discussed by the owner of this local food landscaping company, the garden is a site of empowerment in confronting environmental anxieties and risks.

The fact that wealthy middle and upper class residents can feel empowered by growing food at home stems from a sense of alienation. The alienation of food from average, middle class residents is the result of a long historical process of industrialization, consolidation, and globalization of the food system. Citizens feel alienated not only from the source of their food, but the ecological, social and cultural conditions that went in to producing and transporting food (McClintock 2010). Geographer Nathan McClintock (2010) describes “individual rift” arising from the alienation of individuals from labor and from nature (2010: 201). For McClintock,

individuals are alienated by the separation of labor from the fruits of their labor, as well as alienation from a connection and interaction with local environments and ecologies. McClintock describes urban agriculture as a force of de-alienation (McClintock 2010: 202). Urban agriculture connects individuals directly to the fruits of their labor (literally) as well as to local soil, weather, pests, and ecologies necessary to produce food. The results presented in Chapter 4 characterize a strong motivation for de-alienation of food by shopping at the Farmers Market, participating in community gardens, and growing food at home.

Home gardening empowerment arises through countering cultural hegemonies. The above section describes Paul Robbins' characterization of the front lawn as the landscape "hegemony". In the face of this widely accepted cultural norm many people choose to instead use the space around their house to grow food. Gardening also encompasses practices that counter the hegemony of the industrial food system. In examining whether alternative food system practices are counter-hegemonic, sociologist Joseé Johnston (2007) develops counter-hegemonic criteria. Her criteria include, "Reclaiming the commons – a realm of social life which: restricts commodification; develops alternative modes of meeting life goods; and decreases distance between production and consumption. Creating post-consumer needs & pleasures that: Challenge consumerism's hegemony; provide a proactive vision; create alternative pleasure and empowerment not based on ecological and social exploitation" (Johnston 2007: 20). While Johnston does not discuss home food gardening, this practice fits within her criteria of counter-hegemonic activity. Home food gardening can largely resist commodification. The end products of home gardening are not bought and sold, but instead enjoyed in the household or exchanged between neighbors and friends. The distance between production and consumption is merely the distance from one's home gardens to the kitchen. And

home food gardening is a form of pleasure outside the realm of consumerism, with benefits for both local ecology and social groups.

On the surface home food gardening does not appear to be particularly transgressive or revolutionary. Yet the practices associated with growing food at home challenge cultural hegemonies of what landscapes around the household are appropriate, and how individuals interact with local, regional, and global food systems. Is this way, home gardening is empowering. The labor, knowledge and commitment involved encourage the de-alienation of individuals from nature, their labor, and their source of food. Gardening helps individuals feel empowered about environmental risks and uncertainties, by taking the production of food into their own hands.

CONCLUSION

Home food gardeners all make a choice; to take a shovel to their turf grass and plant seeds that will eventually become food served at the kitchen table. This choice is often the product of complicated and varied motivations, and the choice holds the promise of hours spent outside digging, planting and pulling weeds. For those who make this choice, gardening becomes a strong marker of personal identity. Identity is embodied in choosing to go against the normative landscape aesthetic, and is displayed in what types of things are grown, how they are grown, and where they are grown. The embodied garden identity is produced on our very American landscapes, the large areas surrounding our households. This landscape is private yet public; open to the homeowner's whims but under constant community scrutiny. Whether trying to emulate some long remembered childhood garden, or bringing one's native foods to a new place, or even just to save some money on food, the garden is an outward, public expression of identity.

A gardener's identity becomes a marker, attracting others in the surrounding neighborhoods that have also chosen to subvert the hegemony of the lawn. And through these common identities and practices, new social spaces and relationships emerge. When asked if they discuss gardening with other people, every single participant in this research project except for one answered in the affirmative. Everyone talks about the food they grow, whether to siblings, friends, neighbors or coworkers. Most often these individuals discussed with other home food gardeners, forming communities united around a common set of practices that helped shape and define their identities. These communities often blossomed into the creation of new spaces, where garden clubs and community gardens formed and the desire and passion to grow food were spread to new people and places.

As gardens reflect socio-economic climates, the absence of home food gardens is also significant. Athens is composed of neighborhoods of wide economic disparity, and this too is reflected in gardens. The presence of gardens was much less in low income neighborhoods in Athens. This result is not surprising, as individuals in these neighborhoods have significant less access to the knowledge, inputs, and land necessary for maintaining a productive food garden. Encouraging food gardening in these low income neighborhoods would be a positive venture, especially considering that research has shown that "growing food contributes to food security at all income levels by encouraging a more nutritious diet" (Kortright and Wakefield 2010: 1). Increased food security in low-income neighborhoods is significant, especially considering low income neighborhoods are often associated with food deserts and poor health outcomes associated with low quality diets (Swinburn et al. 2004). However, Athens shows promise in confronting some of these issues. The creation and initial success of the Broad Street Market

Garden is promising for the promotion of locally grown foods and increased vegetable diets in one of the lowest income neighborhoods in Athens.

Converting lawn space into garden space does not happen in a vacuum. The history of victory gardens, immigrant allotment gardens, and low-income neighborhood community gardens demonstrate that food gardens embody a concordance, or resistance, to larger socio-political forces. The garden is a space where politics is demonstrated. And while motivations for home gardeners in this study vary widely, a common trend is motivations for growing food at home were ecological concerns. The top six reasons as scored by participants in this study reflect environmental concerns about where food comes from, how it tastes, and how it was grown and shipped before it reached their local grocery store. These motivations are significant in making the choice to garden, and reflect a knowledge and desire to confront environmental risk and uncertainty in our industrial food system. The garden reflects green political thought put into practice, approaching the conception of ecological citizenship in the everyday realm of the household.

Approaching ecological citizenship is more than a change in politics, but instead an increased effort to lower one's ecological footprint and consume less energy and resources. The continued growth of home gardening and community gardening in the United States is a demonstration of individuals increasing environmental consciousness and commitment to perusing an alternative food system that embraces ideals of stewardship, empowerment, and sustainability. Further research is required to describe the exact energy debts and savings in home gardening, and in describing practices that can help gardeners produce food in more sustainable ways that require less energy and water. However, home food production offers the promise of fulfilling the goals of lessening energy use and resource consumption. A productive

garden can supply the majority of vegetables for a family, eliminating industrial production necessities, global supply sources, and energy intensive transportation and storage.

Growing food at home requires knowledge, labor, and getting dirty. Gardening practices reflect increased awareness and concern about environmental issues associated with our global industrial food system, while taking positive steps to lessen a household's ecological footprint. The vegetables produced are heralded as fresh tasting and delicious, as gardeners should also be commended for actively growing ecological citizenship in their front yards.

LIMITATIONS AND FUTURE RESEARCH AVENUES

In addition to the contributions of this thesis to the gardening literature, these results were limited by the small scope of this research project as well as the research design. Canvassing neighborhoods to find gardens has limitations, as is discussed earlier. People who grow food in their backyards are invisible to this method, decreasing the reported number of people who grow food. This is a possible explanation for why this project found around 5% of households grows food, while according to results from the National Gardening Association survey 37% of households in America have food gardens (National Gardening Association 2009). It is possible that certain neighborhoods are more under-represented in my sample than others, such as low-income neighborhoods where lots are small, close together, and often fenced.

Following the research design of this project, I only spoke with and interviewed people who grew food in their homes. I did not interview people who didn't have gardens, which could have answered a number of questions. When I discuss why low-income households don't grow food my arguments rely on speculation. This project was designed to ask individuals why they decided to grow food, and not why they chose not to grow food. Any reasons supplied as to why individuals in low-income neighborhoods do not grow food was not based on the questionnaire,

but instead speculation formed by a literature review and discussions with people who did grow food.

There are many forms of expression in the home landscape, and in this project I only focused on one – the food garden. There are other expressions of the home landscape that were not described in this project. Households with wildflowers, native plants, flowering trees, or nicely landscaped shrubs are all other options available to those who seek alternatives to a turf grass lawn. Because this project focused on food gardens, the motivations and desires of homeowners with different types of home landscapes were not recorded. It would be interesting to see if homeowners with well landscaped yards of local plants were also motivated by ecological concerns.

The limited scope of this project points toward avenues of future research on home gardens. Definitions of ecological citizenship rely on the use of material and metabolic relationships defined through the ecological footprint. It would be significant to measure if home food gardens decrease ecological footprints and if so by how much. This would be a difficult task – every home garden is different and every gardener is different in how they manage their garden and their resources. A detailed energy budget of the home garden could supply more information on the significance of gardening in lowering a household's ecological footprint.

Another significant avenue for research would be combining research into home gardens with research into community gardens. Community gardens are gaining in popularity, and there is already a significant body of literature covering their benefits, goals, and expressions. Combining this research with research into gardens could be fruitful. Why do some people grow food at home, while others only grow food in community gardens? Is this related to access to resources, land, knowledge, seeds? How do social and group identities vary between participants

in community gardens and neighbors who have home gardens? Research into these issues could better address the larger issue of who gardens and why. Home food gardens are significant and interesting places. I am glad to contribute to the growing understanding of food gardens and gardeners, and I hope that food gardens receive significant research attention in the future.

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APPENDIX A - Questionnaire

Why do you grow food at home or in your yard?

I am going to list some reasons a person might grow food at home. Please tell me if these reasons are not important, a little important, somewhat important, or very important in why you have chosen to grow food at your house:

	Not Important	A little important	Somewhat Important	Important	Very important
Access to fresh food					
Monetary savings					
Increased exercise					
Eating locally					
Know where your food comes from and what is in it					
Looks nice/ pride in home and yard					
To grow food organically					
Runs in the family, connects you to your roots/history					
Because it is good for the environment					
To eat seasonally					
Grow crops not available in stores					
To participate with family, friends and neighbors					

To teach family/children about growing food					
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Are there any reasons why you grow food that I didn't list above? Please list and explain:

Ecological Citizenship

*** For every reason that a person says IMPORTANT or VERY IMPORTANT please ask them to explain why this is important for them ***

Practices

How many times on average per week do you work in your homegarden/ tend to your edible landscaping?

Did you construct anything to help aid you in homegardening/landscaping (raised beds, trellises, compost boxes, hoop houses, green houses)

Do you compost?

Did you plant the fruits and vegetables yourself?

Do you tend to the garden by yourself or with assistance? From whom – (family, friends, landscapers, extension agents)

Do you participate in GA extension agent activities (meetings, information sessions, Master gardener programs)?

Communities of Practice

Do you participate in community gardening?

Do you discuss gardening with neighbors, family or friends? If yes, do you discuss – methods, techniques, knowledge, behaviors, ecology?

Do you share seeds or plants with neighbors, family or friends?

Do you work on gardening project with neighbors, family or friends?

APPENDIX B – LIST OF COMMUNITY GARDENS

Garnett Ridge Community Garden

Hill Chapel Baptist Church

Church and Johnson Foundation Community Garden

Pinewoods Estates North

Riverwoods Apartments

ACC Council on Aging

Athens Permaculture Group Garden

Pope Street Neighborhood Garden

Boulevard Community Garden

Brooklyn Community Garden

UGA Married Housing Garden

UGarden

APPENDIX C – GARDENING SAVES MONEY SOURCES

Source	Location	Year	Include Labor	Cost	Yield	Profit
Get Rich Slowly Garden Project (BLOG)	Maine	2008	No	\$318.43	\$606.97	\$288.54
Kitchen Gardeners International (BLOG)	Oregon	2009	No	\$282.00	\$2,431	\$2,149.00
GRIT: Growing a Vegetable Garden Saves you Money	Not Reported	2010	No	\$300	\$1,470	\$1,170
Stall 1979	Homestead, Fl	1979	No	\$333.65	\$495.70	\$162.05
Stephens et al. 1980	Tallahassee	1980	No	\$70	\$384	\$314
Stephens et al. 1980	Jacksonville	1980	No	\$83.00	\$416.00	\$333.00
Cleveland et al. 1985	Tucson #1	1985	Yes	\$45	\$154	\$109
Cleveland et al. 1985	Tucson #2	1985	Yes	\$56	\$178	\$122
National Gardening Association	-	2009	No	\$70	\$600	\$530.00