

URBAN GARDENING IN PHILADELPHIA

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ABSTRACT: *A vibrant urban gardening movement exists in Philadelphia, providing an impetus for an investigation into who is gardening, and what is the motivation driving the actors. Have gardeners shifted from simply a local focus of providing food and beautifying neighborhoods, to acknowledging larger interests such as carbon impacts, environmental justice, food security, social equity, and public health? To answer these questions, quantitative and qualitative methods are used to research urban agriculture in the city of Philadelphia. First, the socioeconomic characteristics of neighborhoods which contain community gardens are spatially analyzed using GIS and Census Bureau data. Is there a spatial relationship between the distribution of community gardens and socioeconomic variables? If a relationship does exist, what is the form of the relationship? Qualitatively, the researcher toured grassroots community gardens with the Pennsylvania Horticultural Society and attended a town hall meeting at the Philadelphia Academy of Natural Sciences to investigate how gardeners address concepts of food security, environmental sustainability, and social equity. The results indicate the role of urban gardening is often more complex than simply to provide nourishment. Instead, the gardening movement is concerned with having a more political role at multiple scales.*

Keywords: *Urban geography, GIS, Philadelphia, Urban garden, Community garden*

INTRODUCTION

A recent look at gardens organized by citizens of Philadelphia revealed a well organized movement with clearly defined goals. This project uses spatial analysis to examine the socioeconomic characteristics of neighborhoods which host popular grassroots community gardens in Philadelphia. Is there a spatial relationship between the distribution of community gardens and socioeconomic variables? Is there a spatial relationship between these gardens and the location of formal city park space?

While developing this project the researcher attended a garden tour with the Pennsylvania Horticultural Society, a nonprofit organization which aims to “motivate people to improve the quality of life and create a sense of community through horticulture.” The society works with thirteen independent garden locations spread throughout the city. These thirteen garden locations were geocoded and the socioeconomic conditions in Philadelphia neighborhoods which host the gardens were analyzed at the census tract level. This endeavor was made possible using ArcGIS software, Microsoft Excel, and 2000 U.S. Census Bureau data. The socioeconomic indicators were chosen to provide a broad overview of conditions possibly related to

community gardening. The indicators include; population density, race, home values, household income, welfare and poverty rates, and commute time. The following tables display the socioeconomic indicators of Philadelphia census tracts which host the urban gardens. The accompanying maps (Figures 1-3) help visualize key findings.

ANALYSIS

The garden locations seem to occur in areas of moderate population density. Garden tracts have varying degrees of racial integration. Tract 165 is 92% white while tract 172 exhibited a white population of less than 1% (Table 1). Race does not seem to be a decisive factor in the location of gardens; rather the racial demographics of tracts reflect the general spatial distribution of race within Philadelphia. Home values varied substantially with a low of \$15,300 and a high of \$165,200. With the exception of the Southwalk Community Garden and the Somerton Tanks Farm, nearly all the gardens were located in tracts where the average annual income is below \$25,000. Tract 182 had the lowest

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Table 1. Socioeconomic Indicators

	Tract ID	Population Density People/ sq. kilometer	% African American	% White
Southwalk Community Garden, 311 Christian St., 19147	17	1,173.76	12%	83%
Summer- Winter Garden, 3233 Race St., 19104	95	1,210.52	19%	62%
Sloan St. Garden, 326 S. Sloan St., 19104	96	666.45	57%	30%
Aspen Farms, 4837 Aspen St., 19139	109	748.00	97%	1%
Mill Creek Farm, 4900 Brown St., 19139	109	748.00	97%	1%
Journey Home, 948 N. 8th St., 19123	146	403.10	86%	9%
Liberty Lands, 913 N. 3rd St., 19123	147	272.91	21%	61%
Cohocksink Garden, 136 W. Thompson St., 19122	149	519.63	31%	39%
Greensgrow Farms, 2501 E. Cumberland St., 19125	165	1,031.21	3%	92%
Las Parcelas, 2238 Palethorpe St., 19133	167	663.43	25%	22%
Glenwood Green Acres, 1801 Glenwood Ave., 19312	172	1,134.10	97%	0%
Friends Community Garden, 2751 N. Front St., 19133	182	994.22	11%	24%
Somerton Tanks Farm, 201 Tomlinson Rd., 19116	369	338.33	3%	87%

Table 2. Socioeconomic Indicators

	Tract ID	Median Home Value \$	Median Household Income \$
Southwalk Community Garden, 311 Christian St., 19147	17	165,200	48,889
Summer- Winter Garden, 3233 Race St., 19104	95	98,900	13,792
Sloan St. Garden, 326 S. Sloan St., 19104	96	86,700	17,500
Aspen Farms, 4837 Aspen St., 19139	109	28,900	21,772
Mill Creek Farm, 4900 Brown St., 19139	109	28,900	21,772
Journey Home, 948 N. 8th St., 19123	146	68,600	12,165
Liberty Lands, 913 N. 3rd St., 19123	147	70,900	30,862
Cohocksink Garden, 136 W. Thompson St., 19122	149	36,300	23,720
Greensgrow Farms, 2501 E. Cumberland St., 19125	165	44,600	29,621
Las Parcelas, 2238 Palethorpe St., 19133	167	21,600	13,833
Glenwood Green Acres, 1801 Glenwood Ave., 19312	172	19,400	16,367
Friends Community Garden, 2751 N. Front St., 19133	182	15,300	11,909
Somerton Tanks Farm, 201 Tomlinson Rd., 19116	369	111,300	54,449

Table 3. Socioeconomic Indicators

	Tract ID	Welfare Rate	Poverty Rate	Commute Time > 45 Min.
Southwalk Community Garden, 311 Christian St., 19147	17	1%	13%	10%
Summer- Winter Garden, 3233 Race St., 19104	95	6%	45%	10%
Sloan St. Garden, 326 S. Sloan St., 19104	96	5%	34%	15%
Aspen Farms, 4837 Aspen St., 19139	109	13%	36%	29%
Mill Creek Farm, 4900 Brown St., 19139	109	13%	36%	29%
Journey Home, 948 N. 8th St., 19123	146	27%	46%	15%
Liberty Lands, 913 N. 3rd St., 19123	147	7%	22%	20%
Cohocksink Garden, 136 W. Thompson St., 19122	149	18%	34%	19%
Greensgrow Farms, 2501 E. Cumberland St., 19125	165	9%	23%	18%
Las Parcelas, 2238 Palethorpe St., 19133	167	35%	61%	28%
Glenwood Green Acres, 1801 Glenwood Ave., 19312	172	19%	46%	31%
Friends Community Garden, 2751 N. Front St., 19133	182	34%	63%	27%
Somerton Tanks Farm, 201 Tomlinson Rd., 19116	369	4%	4%	28%

median household income at \$11,909. Tract 369, Somerton Tanks Farm had the highest median income at \$54,449 (Table 2). The poverty rate data corresponded to the median household income data. Similarly, the tracts with gardens, with the exception of Southwalk Community Garden and the Somerton Tanks Farm, exhibit high poverty rates. The welfare rate varied between 1% and 35% of the population in tracts with gardens. The three tracts with the highest

African American populations also had the highest median commute times (Table 3). Figure 1 shows that when the locations of the gardens were compared with an overlay of the Fairmont Park system it is apparent that gardens tend to be located in areas which are distant from formal city park space. Perhaps the creation of urban gardens happens in part as a reaction to a lack of public open space.

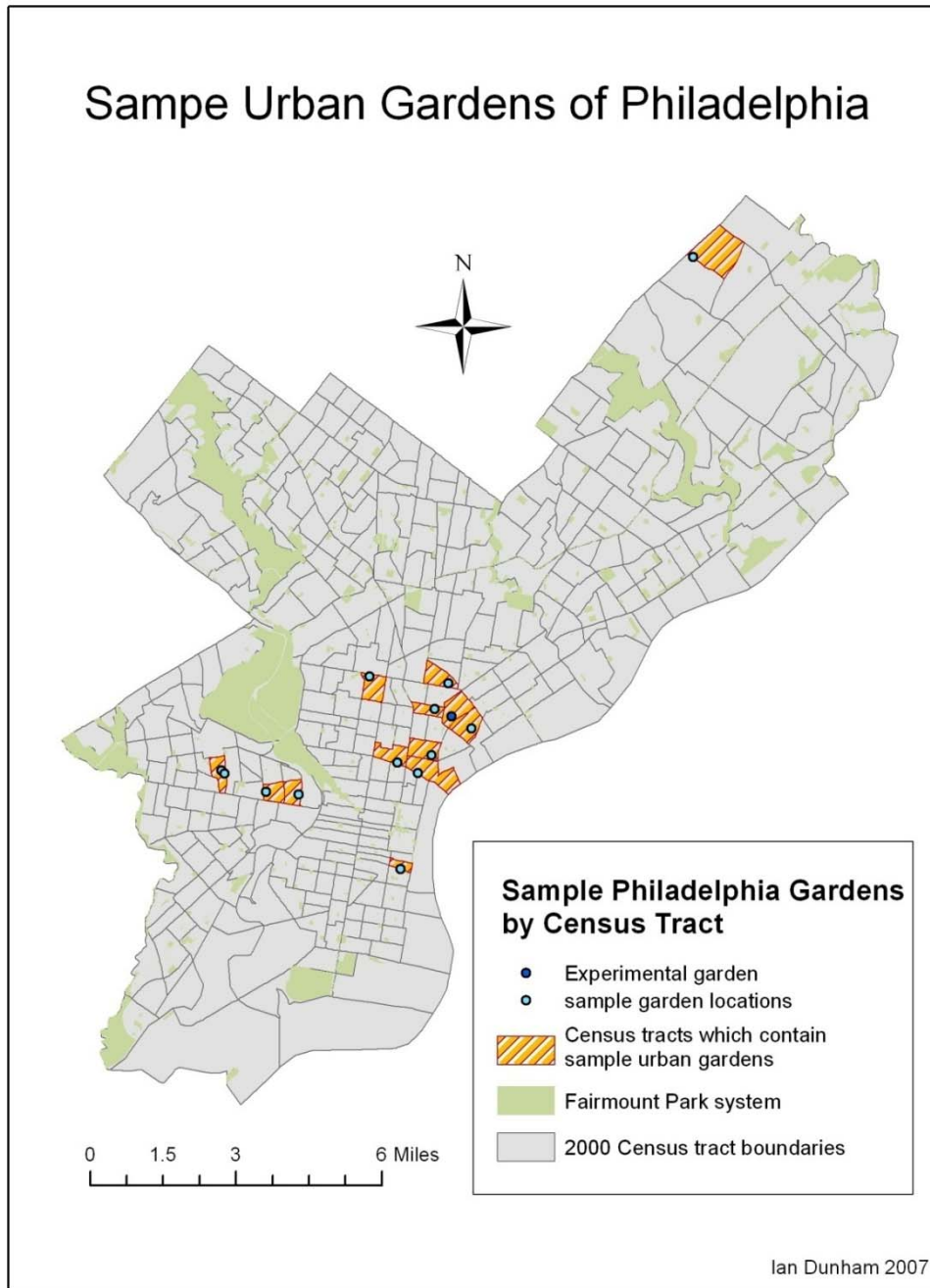


Figure 1. The Fairmont Park system.

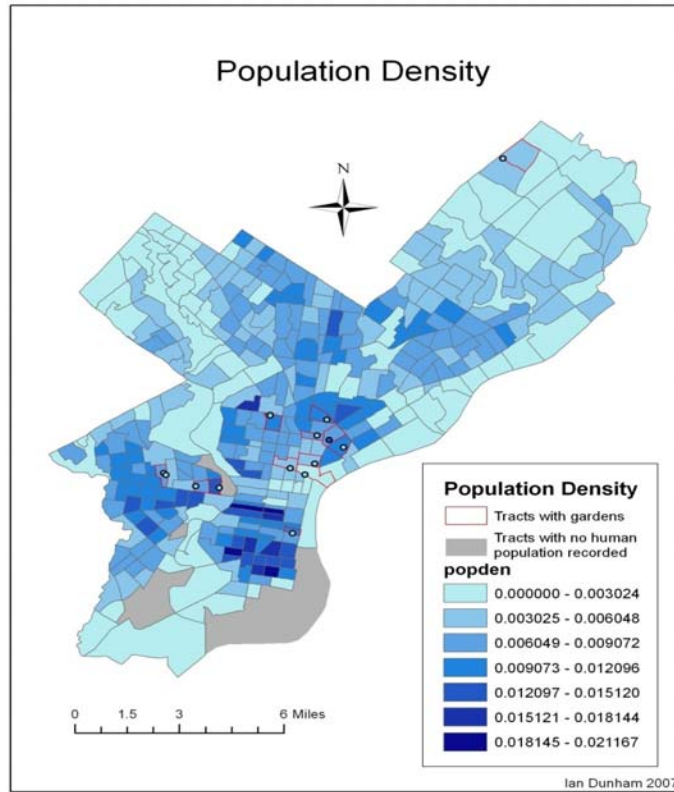


Figure 2. Population density.

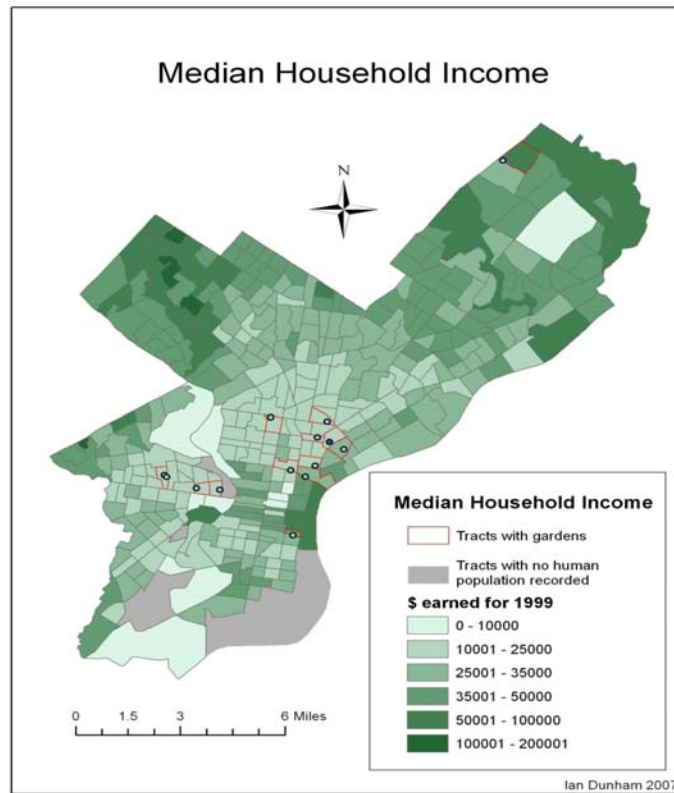


Figure 3. Median household income.

Motivation for the Movement

This section of the paper is mainly concerned with the political motivation behind the community gardening movement. What issues, and what scale is the movement concerned with? The investigation included attending a town hall meeting at the Academy of Natural Sciences (ANS) in the spring of 2007, entitled "Sustainable Food: Access and Accountability."

Originally community gardens were viewed for the most part as a benefit to the local scale, benefiting direct participants and local neighborhoods. A historical examination of Philadelphia reveals a lengthy commitment to open space and to community gardening. When Thomas Holme and William Penn were planning the original grid pattern for Philadelphia, many European cities were struggling to remedy the problems resulting from their cramped confines. The dangers of fire and disease were among the potential problems of lack of planning. William Penn envisioned Philadelphia as a "widely dispersed, low density, countrified town" (Dunn and Dunn, 1982). The "Greene Country Towne" plan included wide streets and five squares set aside as public parks. Penn originally created 530 individual acre and half-acre parcels meant for large estate houses. Fifteen years later in 1689 the city was one of the most congested communities in America as landowners divided the original lots into as many as 20 lots and row housing, thus eliminating orchards and gardens (Dunn and Dunn, 1982). Philadelphia has a history of organizations dedicated to promoting urban gardening. The Vacant Lots Cultivation Association was formed in 1897. The Neighborhood Garden Association of Philadelphia was formed in 1953 to "stimulate a sense of pride in blighted areas of the city" (Bush-Brown, 1969). Another major development of open space in Philadelphia was the creation of Fairmont Park in 1885. The park was established to "protect and improve the purity of the Schuylkill water supply" (Weigley, 1982). By 1869 the park system contained 3,000 acres and stretched thirteen miles from the Callowhill entrance to the upper extent of the park (Beers, 1982).

In addition to benefits to the local scale, the urban gardening movement also acknowledges a responsibility to the regional scale. Today increased importance is being placed on diversifying food production systems and making regions more self-sustaining. One local non-profit organization which takes a distinctly regional approach to community gardening is the White Dog Community Enterprise. "Our mission is to cultivate a Philadelphia regional economy that is inclusive, just, environmentally healthy, and based on local business ownerships."

The foundation uses local produce products at their restaurant, The White Dog Café. Both the Café and Foundation work to encourage gardening and make gardens commercially profitable while marketing an environmentally friendly premise. At the town hall meeting on community gardening at the ANS in the spring of 2007, Ann Karlen, the Founding Director of the Philadelphia based White Dog Café Foundation's Fair Food Project, discussed the role of local gardening on the world stage. Other speakers included Kathy Lawrence, the former Director and founder of the New York City based Just Food Organization, and Gary Giberson, the Executive Chef at the Lawrenceville School in New Jersey. A sense of responsibility to how the Philadelphia region interacts with global environmental issues was an overriding theme. In terms of environmental activism, one global issue Philadelphia gardeners are well aware of is the use of genetically modified organisms and pesticides. Local control of food and food choices (food sovereignty) was a major theme. The presentations also linked the local Philadelphia gardening movement to the slow food movement, fair trade, carbon impacts, and vegetarianism.

CONCLUSION

The tracts examined represent a wide diversity of racial, housing, and socioeconomic indicators indicative of the diverse nature of the city. Mixing the qualitative and quantitative analysis it is concluded that gardens are stimulated by the right mix of availability of inexpensive or vacant land and a local population with enough social capital to see such a project through. The investigation revealed the role of urban gardens is more subtle and complex than simply to provide food. Although urban gardening is essentially concerned with benefiting the immediate area, the motivation behind gardening has evolved to fill new purposes such as environmental sustainability and social equanimity.

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