



CULTIVATE L.A.:
AN ASSESSMENT OF
URBAN AGRICULTURE IN
LOS ANGELES COUNTY,
JUNE 2013

Executive Summary

This research about urban agriculture in Los Angeles County adds depth and breadth to the ongoing, complex conversation of food and the city. Created over many months of research, a team of UCLA Urban Planning graduate students contacted over 3,000 entities in the pursuit of creating baseline data of urban agriculture to better understand the regional agricultural environment and the strategies of urban farmers.

To access the full report, interactive map, and all data, go to <http://cultivatelosangeles.org>

Cover photograph by Zachary Zabel, the CityFarm, Los Angeles, CA

The conversation about growing food in cities is becoming increasingly complex. Advocates emphasize the many benefits of urban agriculture, asserting that better access to fresh foods will reduce obesity, that pesticide-free foods are better for the environment, and that growing food where we consume it makes sense. Skeptics of urban agriculture counter that obesity is a complex social issue that has many causes, that industrial agriculture and its chemical uses are necessary for our food supply, and that growing food in cities is not the most economical use of land. The list of positive and negative qualities of urban agriculture is lengthening, as urban agriculture is increasingly discussed.

Why should the lay person care about urban agriculture? First and foremost, urban agriculture is an issue related to the larger debate about the food supply. Food is an essential component of life and in recent history technological advances have changed the na-

ture of food production. Today, most crops are grown and animals are raised in monoculture environments, where farmers devote entire fields to a single crop. There is regional crop specialization and food can travel thousands of miles before reaching consumers. Specialization and trade are part of the food supply's increasing connectivity across regions and countries, a hallmark of globalization.

At the same time, urban agriculture is experiencing a resurgence across the United States. The history of subsistence gardens in the United States dates back to the 1890s, when growing food was used a way to teach skills to unemployed laborers in the industrial cities of the northeast (Lawson, 2005). Government programs during the Great Depression actively subsidized subsistence gardens, while during World Wars I and II "Victory Garden" programs augmented the domestic food supply (ibid). Following World War II, increased economic activity led to the replacement of

“Urban Agriculture (UA) is an activity that produces, processes, distributes, or sells a diversity of food and non-food products, on land and water in urban and peri-urban areas, using or reusing natural resources and urban wastes, to yield a diversity of crops and livestock.”

- Adapted from the United Nations Development Programme, 1996, by the researchers on February 19, 2013.

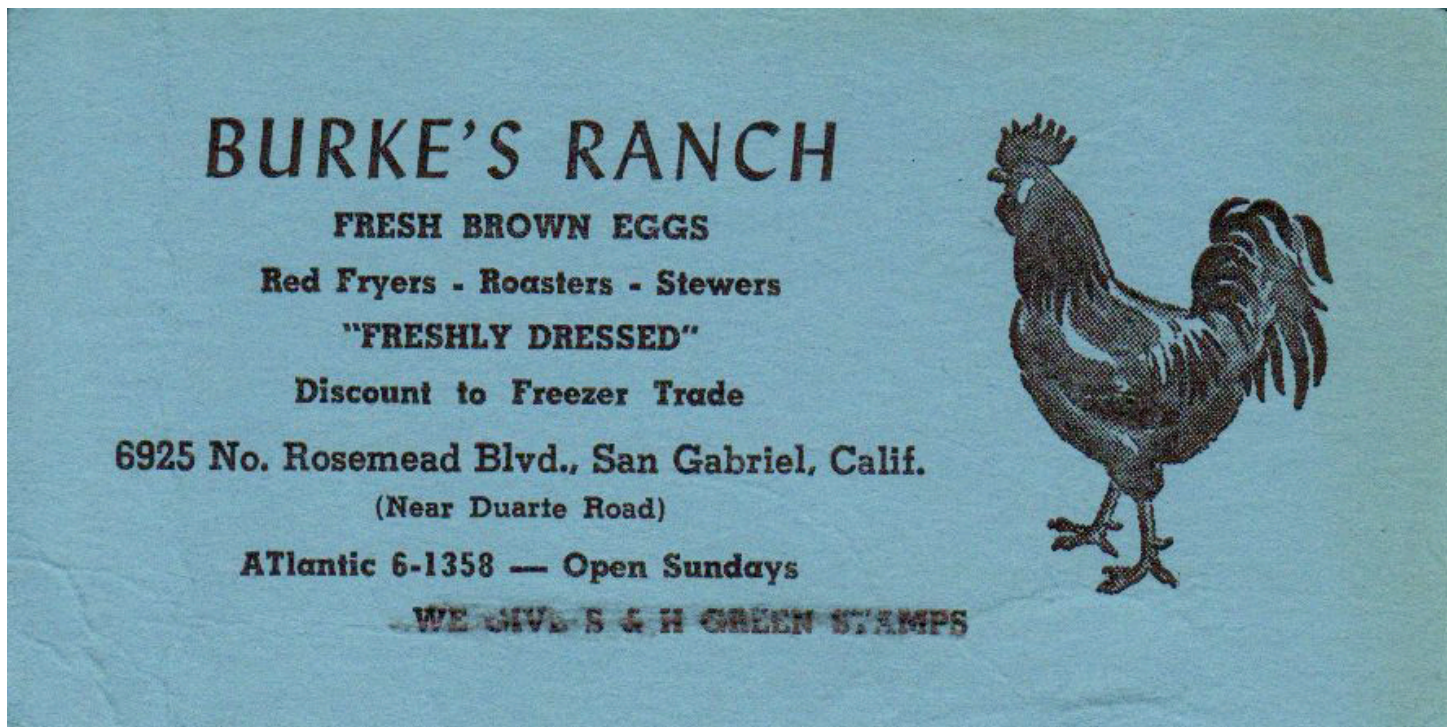
agricultural land with suburban land tracts and a revision of zoning codes that pushed agriculture outside of urban areas (Butler, 2012). Environmental activists advocated for urban farming, access to fresh produce in urban areas and other alternate farming methods in the mid-1970s; as a result, farmers markets opened in California during this time.

As urban agriculture has had ebbs and flows since the early 20th Century, the current upswing to foster school gardens and community gardens can be considered historically significant. Interestingly, despite the many claims made about the benefits and obstacles of school gardens and community gardens and urban agricultural enterprise in Los Angeles, little research exists about their extent, participants, or intersection with land use rules and regulations. The researchers involved with this project suggest that urban agriculture should be better understood by urban planners and that urban agriculturalists should be well versed and more engaged in urban planning dialogue and regulations.

ABOUT THE REPORT

Cultivate L.A.: An Assessment of Urban Agriculture in Los Angeles County, June 2013 is a comprehensive project submitted in partial satisfaction of the requirements for the degree of Masters in Urban and Regional Planning at the University of California Los Angeles and was prepared for the University of California Cooperative Extension - Los Angeles. The research team included 16 graduate students and 3 instructors at UCLA.

The report provides an overview of salient topics related to city-grown food. It was produced to substantially add to the conversation about food in Los Angeles by providing previously unknown quantitative data about the sites and regulations of urban agriculture as of June 2013, while also providing qualitative data about two major groups of urban agriculturists: school gardens and for-profit food entrepreneurs.



*This poultry ranch was redeveloped as a two-story apartment building in the early 1960s.
Source: Private Collection*

Understanding the full extent of urban agriculture in Los Angeles County is critical for planners, policy makers, industry stakeholders, and urban farmers who wish to support agricultural activities in local communities.

The client for this project was the University of California Cooperative Extension in Los Angeles County (UCCE-LA), part of the University of California's Division of Agriculture and Natural Resources. Since its establishment by federal legislation in 1914, Cooperative Extension has served as the local arm of land grant universities in each state, providing research-based information at the community level.

CHAPTER SUMMARIES

The five chapters in the report present research collected as part of a individually focused, yet collectively broad investigation of urban agriculture in Los Angeles County. A summary of each chapter is presented here.

1. Regulating Land Use for Urban Agriculture: Much Ado about Chickens

The report begins with an investigation of current governmental regulations that shape the environment for urban agriculture in Los Angeles County. This chapter presents summaries and statistics from the zoning codes and municipal regulations of all 88 cities in Los Angeles County, as well as its unincorporated areas, detailing which agricultural activities were permitted at the time of the research and which were prohibited. Researchers established classifications for 15 agricultural activities and analyzed trends in municipal regulations.

2. Mapping Urban Agriculture: A Spatial Snapshot

Understanding the full extent of urban agriculture in Los Angeles County is critical for planners, policy makers, industry stakeholders, and urban farmers who wish to support agricultural activities in local communities. Agricultural activities are occurring in numerous locations across the region, but there is currently no comprehensive database of agri-

culture sites in Los Angeles County. This chapter maps the full extent of urban agriculture in the county, focusing on four typologies: school gardens, community gardens, nurseries and farms. Researchers compiled lists from a variety of sources, conducted phone calls for verification, and used Google Earth to visually document existing agriculture in the urbanized region. The final product features an interactive, web-based, and mapped database detailing over 1,200 sites in the county.

3. School Gardens: Learning and Growing

School gardens have existed in Los Angeles and throughout the nation for more than 100 years. Today there are over seven hundred school gardens in Los Angeles County. This chapter discusses the historical context of school gardens and examines various school garden programs in Los Angeles County, identifying factors that present challenges and opportunities for success. Researchers conclude with recommendations for encouraging and sustaining school gardens.

4. Hotspot or Not? Economics and Geography of the Altadena Farmers' Market

Interest in urban agriculture is increasingly associated with the promotion of an alternative food production system that values the quality of the food we eat—including how the food was produced and what the time was from picking to selling. Farmers markets in urban areas are part of an alternative food distribution system that provides a sales venue for quality foods while offering shoppers a pleasant community-based experience. By focusing on producers and sellers of fresh food and artisanal goods at the Altadena Farmers Market, this chapter describes how small urban growers fit into the greater Los Angeles economy, while providing suggestions for policy makers.



Muir Ranch at John Muir High School distributes food through a Community Supported Agriculture (CSA) program. Photograph by Kelly Rytel, Muir Ranch, Pasadena, CA

Based on our findings, growing food is something that city dwellers desire; this is evidenced by the extensive and dense distribution of documented and verified agriculture sites in Los Angeles County.

5. Distribution Strategies for Urban Farmers

This research sought to uncover nuances in the relationship between distribution and urban agriculture. Urban agriculture is an industry, and just like any industry its economic success relies heavily on goods movement. Researchers conducted interviews with for-profit urban growers in Los Angeles County, as well as third-party distributors, grocers, and local restaurants. This chapter presents an account of distribution methods utilized by urban farmers and agriculture producers in Los Angeles County and recommends ways to grow the local industry.

AGGREGATE FINDINGS

The report's findings summarized here are both quantitative and qualitative, capturing a broad range of information. These findings include documentation of existing urban agriculture conditions and an understanding of

how food is grown by for-profit and nonprofit entities. While findings of each chapter in the report may be directed towards specific audiences, the following four common threads characterize the research as a whole.

The Reality of Urban Agriculture is not Reflected in Planning Discourse and Practice

This research assumes the role of planners is to understand the wants and needs of the public, balance competing goals, and effectively facilitate action to realize collective objectives related to land use. Based on our findings, growing food is something that city dwellers desire; this is evidenced by the distribution of documented agriculture sites around the Los Angeles County, found in the *Mapping Urban Agriculture* chapter of the full report. Researchers surmise that demand is even far greater than what is documented, given that data gathering and analysis of backyard gardening were not a part of the study.

Even though the reality is that urban agriculture is taking place on various scales, for

A strong indication of the disconnect between urban agriculture regulation and practice is the lack of comprehensive data gathered by public entities.

Grocery stores use the term “local” as a marketing device to attract customers. For many retailers, it appears to be more important that customers consider food “local” than that the food actually meets a specific standard.

different purposes, and in all 88 cities in the county, urban and backyard agriculture is not effectively managed by planners around Los Angeles. In the chapter *Regulating Land Use for Urban Agriculture*, researchers found that cities and unincorporated areas of LA County have inconsistent, confusing regulations for agricultural activities which often fail to regulate the spaces where food is actually cultivated. Researchers also identified complex, antiquated rules and regulations as an impediment to implementing school gardens (*School Gardens* chapter) and for-profit ventures (*Economics and Geography* and *Distribution Strategies for Urban Farmers* chapters). Researchers discovered that some urban agriculture activities are in direct violation of rules and regulations of cities, the county, and school districts.

A strong indication of the disconnect between urban agriculture regulation and practice is the lack of comprehensive data gathered by public entities. Despite a decades-old urban agriculture movement in Los Angeles, specific locations and characteristics of urban agriculture have not been well documented before. It is the authors’ hope that this research serves as a baseline for understanding aspects of urban agriculture that were not previously understood.

The Definitions of “Local” are Many

Throughout the research process, use of the word “local” was inconsistent. Many different organizations define foods that can be considered “local”; however there is not one standard definition of the term that is accepted across various the food sector. In the *Distribution Strategies for Urban Farmers* chapter, researchers found that grocery stores use the term “local” as a marketing device to attract customers. For many retailers, it appears to be more important that customers consider food “local” than that the food actually meets a specific standard. Some urban agriculture businesses do cite food miles traveled--for example the *Economics and Geography* research-



Whole Foods Market in Santa Monica. Photograph by Zachary Zabel

er found that managers at the Altadena Farmers’ Market advertise distance from the farm to the market at each stand.

The various uses (in some cases, stretched) of the word “local” obscure the fact that growing food within a city is about as local as food can get. This is especially important because California exports food all over the country; that grocery stores and farmers markets in Los Angeles sell food from throughout California may be an effect of fortuitous geography rather than a purposeful effort to source food locally. Emphasizing the hyper-local nature of urban agriculture can be an effective tool to set this type of agriculture apart from other food systems. At the same time, it is important to acknowledge that California is one of the most productive agricultural states in the country, and that comparatively, California-grown produce may be local in contrast to food availability in other states.

Amidst all the discussion and debate about what city-grown food means for our communities, our food chain, and our economy, one universal and striking truth rises above: the passion, commitment and intensity that so many urban agriculture advocates bring to their work.

The need to streamline and coordinate existing information is essential to the understanding of urban agriculture in Los Angeles.

Information about Urban Agriculture is Incomplete

Information available about urban agriculture in Los Angeles County is incomplete. There is no direct way for individuals or organizations to access information about urban agricultural activities. Information is collected in a decentralized and disaggregated manner, which prevents sufficient understanding of the institutional environment in which agricultural individuals and entities are working. Finally, even when information is accessible, it too often is found to be unclear or outdated.

This finding was universal across research areas. In the *Regulating Land Use* chapter, researchers found that there is no universal terminology or regulation of specific agricultural activities in city municipal and zoning codes, while the *Mapping Urban Agriculture* team encountered no all-inclusive database documenting current urban agriculture sites. The remaining researchers, who focused on school gardens and for-profit ventures, interviewed entities that expressed confusion and frustration over the lack of clear, accessible information about regulations and the greater agricultural environment in Los Angeles County.

The Meaning and Significance of Urban Agriculture are in Formation

Previous food movements that centered around cities took shape in different ways. Historically, there has been strong activity in school and community garden movements, while entrepreneurial urban agriculture activity seems to be more active today than ever before. There is debate about the connection between access to fresh, healthy foods and neighborhood rates of obesity. Urban agriculture is viewed by many as the current incarnation of the organic food movement, and the creation of farmers markets in California in the 1970s. An outstanding question is whether or not today's urban agriculture movement has the potential to create an alternate food system, outside of the industrial agriculture model which currently dominates agricultural practice.

However, amidst all the discussion and debate about what city-grown food means for our communities, our food chain, and our economy, one universal and striking truth rises above: the passion, commitment and intensity that so many urban agriculture advocates bring to their work.

RECOMMENDATIONS

The following four recommendations are based on the collective findings.

Streamline, Clarify, and Coordinate

This research revealed a gap between planning discourse, regulation, and reality. The urban agriculture movement continues to grow, and with this growth comes questions of regulations, policies, and legalities. The need to streamline and coordinate existing information is essential to the understanding of urban agriculture in Los Angeles. As described in the *Regulating Land Use* chapter, cities should be encouraged to adopt universal and transparent definitions. Similarly, in the *School Gardens* chapter, researchers suggest that school districts establish a set of feasible guidelines in order to facilitate the creation and longevity of school garden programs. Creating a clear set of definitions and implementation practices will further support urban agriculture's success and growth in Los Angeles.

Re-brand Urban Agriculture Products

As mentioned previously, the food industry's use of the word "local" is inconsistent. Various organizations use the term to describe what they believe their customers will perceive as desirable. This inconsistency obscures the fact that cultivating food within a city, in this case Los Angeles, is hyper-local, and thus a distinction needs to be set in place in order to set it apart from other regional movements. Distinguishing between Los Angeles County-grown foods and "local" foods produced in

Researchers suggest the creation of an online database of agricultural resources and best practices for urban gardeners, farmers, and other interested parties.

Researchers recommend maintaining and updating the interactive map created for this research project in order to keep information about urban agriculture in Los Angeles current. The website and interactive map can be accessed at <http://cultivatelosangeles.org>.

other parts of California is essential. One way to identify city-grown food products is to label them accordingly, e.g., the “[sub]urban farm” label used by Altadena Farmers’ Market vendors. Researchers propose branding and labeling products grown in Los Angeles County in order to maintain the hyper-local, urban agriculture identity of the product and a related consumer education campaign geared towards retailers and restaurants that sell urban agriculture products.

Increase Access to Information, Resources, and Guidelines

Information on the practice of urban agriculture in Los Angeles County is abundant, but not easily accessible in an organized manner. Researchers suggest the creation of an online database of agricultural resources and best practices for urban gardeners, farmers, and others. As highlighted in the *Regulating Land Use* chapter, inconsistencies in zoning regulations and municipal codes create confusion. A committee of the Los Angeles branch of the

American Planning Association or a similar organization could work on urban agriculture code regulations, zoning, and related planning issues in an effort to address this problem. Researchers recommend maintaining and updating the interactive map created for this research project in order to keep information about urban agriculture in Los Angeles current. The website and interactive map can be accessed at <http://cultivatelosangeles.org>. Similarly, publishing information regarding food sources and origins will help educate buyers as to where their food comes from, and will make technical information available to small-scale growers and farmers in order to enhance their business models.

Continue the Dialogue and Research about Urban Agriculture

Even though currently the nature and relevance of urban agriculture varies among constituents, the discussion of food in our cities must continue. Only by collectively understanding the current urban agriculture move-

*Wattles Farm Community Garden .
Photograph by Erik Johnson, Hollywood, Los Angeles, CA*



Only by collectively understanding the current urban agriculture movement can decisions be made towards the best path of action.

The value of this research is as groundwork for future research on urban agriculture in Los Angeles and elsewhere.

ment can decisions be made towards the best path of action. These researchers hope that others will continue and expand on the research collected for this study. Proposed areas of future inquiry are presented in individual chapters; general questions are presented below.

QUESTIONS FOR FURTHER INQUIRY

The information gleaned from this research should be useful not only to urban agriculture practitioners and academic researchers, but also to the public. The research offers quantitative and qualitative findings; however, urban agriculture in Los Angeles is growing in scale and scope. Therefore, the greater value of this research is as groundwork for future research on urban agriculture in Los Angeles and elsewhere. The researchers recommend the pursuit of the following questions for future inquiry:

- Can urban agriculture be profitable?
- Is urban agriculture a desirable land use?
- Can urban produce be “affordable” beyond the scales of domestic consumption and bartering?
- What are issues surrounding water sourcing, particularly in a water-poor region such as Southern California?
- Does the presence of urban agriculture positively contribute to health outcomes in a neighborhood or city?

CONCLUSION

It is hoped that this summary of findings and insights provides the reader with new perspectives on urban agriculture in Los Angeles County. More detailed information on methodological considerations, literature reviews, policy recommendations, and further research can be found in the complete report *Cultivate L.A.: An Assessment of Urban Agriculture in Los Angeles County, June 2013*. The report, individual chapter previews, and an interactive map can be accessed at the website <http://cultivatelosangeles.org>. Within the report, the combination of research methodologies, both quantitative and qualitative, paints a broad picture of urban agriculture in the county, with details that prompt fine-grained investigation for vested interests on the local level. The researchers look forward to their “first fruits” of research making way for future studies of urban agriculture, advancing the understanding and facilitation of this ancient human tradition as an integral part of today’s urban life.

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LAND USE FOR URBAN AGRICULTURE

Much Ado About Chickens



CHAPTER HIGHLIGHTS

Research Question

Zoning codes and municipal regulations dictate the legal uses of the built environment, which includes urban agriculture. Within Los Angeles County, regulations regarding urban agriculture differ between cities and, in many cases, are non-existent. This chapter assesses the regulatory landscape of urban agriculture in each of the 88 cities in Los Angeles County as well as its unincorporated areas, and sought to answer the question:

How do cities in L.A. County regulate flora and fauna?

The research focused on understanding the regulations of all cities within Los Angeles County. While county-wide ordinances are rare, the Los Angeles region is exceptional in the number of cities and urban spaces that blend together, so that one may travel from Venice to Hollywood (both within the City of Los Angeles) but pass through the cities of Santa Monica, Beverly Hills, and West Hollywood. The cities create a fluid, seamless urban form, but their regulations do not. Understanding the differences between these regulations is crucial for anyone wishing to further the development of urban agriculture.

About the Report

The report *Cultivate L.A.: An Assessment of Urban Agriculture in Los Angeles County, June 2013* provides an overview of salient topics related to city-grown food. It was produced to substantially add to the conversation about growing food in Los Angeles. The five chapters of the report present original quantitative data about urban agriculture sites and regulations and original qualitative research about two major groups of urban agriculturists: school gardens and for-profit food entrepreneurs.

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Cultivate L.A. is a comprehensive project submitted for the degree of Masters of Urban and Regional Planning at the University of California Los Angeles and was prepared for the University of California Cooperative Extension - Los Angeles.

About the Researchers

This report was created by a team of 16 graduate students and 3 instructors at UCLA. This chapter was prepared by Jaemi Jackson and Zachary Rehm, with assistance from Jes Howen McBride and Matthew Rising.

CHAPTER HIGHLIGHTS

Methodology

Researchers located municipal and zoning codes on city websites and external code databases, and then searched the codes for all relevant references to urban agriculture activities. Searches included the exact words representing 15 core urban agriculture categories of flora and fauna, as well as additional search terms (shown in brackets). The 15 categories include: Agricultural Waste [agricultural waste, green waste, compost, mulch, worm]; Aquaculture [aquaculture]; Bees [bee, apiary, hive]; Fish [fish]; Farms [farm]; Fowl [fowl, poultry, chicken, rooster, turkey, hen, goose, pheasant, egg]; Fruits/Vegetables [fruit, vegetable, crop, nut, berry]; Garden [garden]; Goats [goat]; Heavy Livestock [livestock, cattle, cow, dairy, sheep, ox]; Horses [horse, equine]; Horticulture [horticulture, ornamental, flower]; Nurseries [nursery, nurseries]; Pigs [pig, hog, swine]; and Rabbits [rabbit].

Major Findings

Researchers compiled a table and an appendix with data on the agricultural activities allowed in each of the 88 cities in Los Angeles County. Each agricultural activity is categorized as permitted, prohibited, or not referenced in the municipal and zoning codes. No agricultural activity is actively regulated, permitted or prohibited in every city; many city codes make no mention of many agricultural activities.

Out of the 88 cities in the County, 29 have specifically designated an agriculture zone. The City of Beverly Hills has the fewest regulations, while the City of Gardena prohibits more agricultural activities than any other Los Angeles County city. Fowl is the most regulated agricultural activity, permitted in some form under certain circumstances in 75 cities, while just seven cities explicitly

prohibit fowl. Fowl is referenced in 59 cities' municipal codes and 49 zoning codes (oftentimes in both), although six cities do not reference any terms within this category at all.

Recommendations

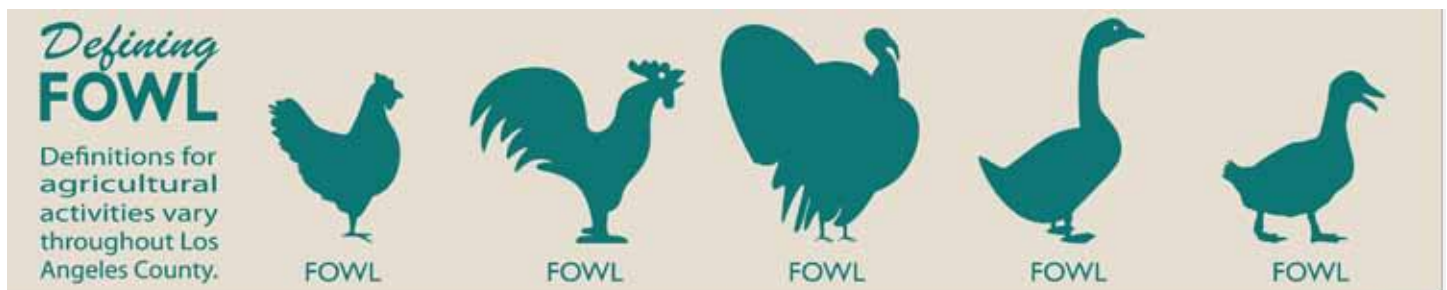
Based on their findings, researchers included the following recommendations:

1. Cities should adopt universal definitions for agricultural activities and urban agriculture sub-components.
2. Cities should look to their own general plans, sustainability elements, and stated policies to regulate urban agriculture. From there, they should take a clear policy stance on urban agriculture and determine how they want to regulate it.
3. Cities within Los Angeles County should strive to synchronize their municipal and zoning codes in sync with one another. Regulations on agricultural activities should be listed within the municipal code and permitted uses related to those activities should be specified consistently in the zoning code.

Future Research

Researchers also presented the following areas for future research:

1. Dive deeper into agricultural regulations, as research on planning and zoning for urban agriculture is limited compared to other land use activities.
2. No city has created a model code for urban agriculture that can be easily applied by other cities. Therefore, future research should identify best practices in regulating agricultural activities.



Designed by Jaemi Jackson. Chicken designed by Carly Vanderlee, Turkey designed by Matt Steele, Duck designed by Isabel Martinez Isabel, Goose designed by José Hernandez (all from The Noun Project).



MAPPING URBAN AGRICULTURE *A Spatial Snapshot*

CHAPTER HIGHLIGHTS

Research Question

The research presented in this chapter was conducted to produce maps showing all documented locations of urban agriculture within Los Angeles County. Researchers conducted spatial analyses to compare various census tract data to the location of the agriculture sites. The parallel goals of this work were to document the locations of urban agriculture at a specific moment in time and to establish a baseline interactive map, which can then be updated continually to reflect the constant changes taking place in this realm. Research questions were:

“ “ How many
urban agriculture
sites are in Los
Angeles County? ” ”

“ “ Where are they
located? ” ”

About the Report

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About the Researchers

This report was created by a team of 16 graduate students and 3 instructors at UCLA. This chapter was prepared by India Brookover, Erik Johnson, Youngjun Kim, Wenchong Lai, Mayra Navarro, Alba Pena, and Hyejeong Yoo.

CHAPTER HIGHLIGHTS

Methodology

Spatial data of existing urban agriculture in Los Angeles County is currently piecemeal at best. This chapter presents the results of comprehensive research, including over 3,000 phone calls inquiring about on-the-ground activities at school gardens, community gardens, nurseries, and farms. Researchers compiled lists from many sources, conducted phone calls for verification, and used Google Earth to visually document existing agricultural activities. With this methodology, almost 1,300 diverse urban agriculture sites were found in Los Angeles County.

Major Findings

The mapping research team found the lack of an accurate and comprehensive urban agriculture inventory intriguing and worthy of examination. The absence of information presented an opportunity to fill this void and bring the extent of urban agriculture to the surface in the form of a comprehensive and interactive map, available to anyone at any time. By documenting and mapping the diversity of urban agricultural sites, the research team sought to expand the information readily available to all stakeholders. Comprehensive maps with documented agriculture sites can serve as a spatial analysis tool for policy makers and researchers, when linked with demographic data and city codes. Although more in-depth analysis is necessary to determine which causal relationships exist between agriculture sites and other geospatial data, this research begins with analysis of relationships between the sites and census tract data.

The four categories of inventory included:

- Community Gardens
- School Gardens
- Farms
- Nurseries

Included within the report are static maps of data collected during Spring 2013, which are relevant as of June 3, 2013.

Because urban agriculture is not static, the research team created an interactive map which will be hosted by the project's client UC Cooperative Extension-Los Angeles. From this map, the website host can continuously update agricultural activities with the help of website users, who will be able to efficiently provide the website operators with the location and type of new agriculture sites. Relevant demographic data will be joined with the locations of the agricultural sites. The interactive map is being hosted at UCCE's urban agriculture website, which is accessible at <http://celosangeles.ucdavis.edu/>.

Recommendation

The general difficulty in collecting these data was in the ephemeral nature of agricultural sites. Regular maintenance of this database will be important with respect to the data collected, but also as a tool for forging relationships with schools, growers, and businesses. Current and comprehensive agricultural databases must be maintained for accurately evaluating of the state of urban agriculture activity in the county.

Future Research

Future research may also focus on the 513 agricultural sites discovered through aerial visual scans on Google Earth which were not included in this analysis because they could not be identified and verified. This high rate of undocumented sites demonstrates the current lack of publicly available information about agricultural locations and typologies in Los Angeles County.



Designed by Jaemi Jackson.

SCHOOL GARDENS

Learning and Growing



CHAPTER HIGHLIGHTS

Research Question

The research presented in this chapter was conducted to gain an understanding of school gardens in Los Angeles County. The proposed research questions were:

“What are the benefits of school garden programs?”

“What are some of the challenges in creating and sustaining school gardens in Los Angeles County?”

About the Report

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About the Researchers

This report was created by a team of 16 graduate students and 3 instructors at UCLA. This chapter was prepared by Genevieve Hernandez.

CHAPTER HIGHLIGHTS

Methodology

This researcher conducted site visits at schools throughout Los Angeles County. The primary motivation for the research was to meet individuals who were familiar with school gardens and who interact with school gardens regularly. The site visits consisted of open ended questions followed by walk-throughs of the school garden. The end result was an informational exchange with experienced school gardeners and a detailed account of their challenges and accomplishments.

Major Findings

The school gardens visited throughout Los Angeles County varied in size from a 15 x 10 foot lot to a garden of almost two acres. The school gardens varied by type as well, ranging from edible and non-edible school gardens to instructional school gardens and literacy gardens. The length of existence of the gardens visited varied from two years to 11 years.

A central theme was consistently raised during each visit: informants felt strongly positive about the academic benefits of school gardens. Many believed school gardens to be an essential physical component of the school landscape, and not only as an aesthetic feature, but also as essential to the students' learning experience. Respondents also stated the importance of having the school administration's full support of the school garden project in order for it to be truly successful. Another key theme was collaboration with the community. The issue of adequate funding was another important theme and many school gardens had developed creative ways to raise funds. Finally, as respondents discussed some of the challenges they faced, they overwhelmingly agreed that most of these challenges could be overcome.

Recommendations and Future Research

Based on respondents' experiences with school gardens, there are issues with school district policies related to school gardens. Respondents felt that school districts

were not always up to date with the needs of each particular school, and in many cases school garden organizers felt the school districts acted as a deterrent to innovative projects. Furthermore, school garden organizers were not fully informed by district-level guidelines related to implementing garden projects. As districts are preoccupied with a multitude of projects, school garden projects were not perceived to be a priority. Based on information from the interviews, developing school gardens is a behind-the-scenes activity. More connectivity and collaboration between school districts and school garden sites are needed.

While schools with school gardens want to incorporate the gardens into the curriculum, obstacles include a lack of time, money, and resources. Although school gardens provide a perfect environment to integrate a wide-range of lessons from math, language arts, science, nutrition, and more, teachers lack the time to integrate garden lessons with curricula which is required to be taught in the classroom.

Furthermore, in order to have the opportunity to establish a school garden curriculum, it is important to have a well-established garden in place. The funding to provide a well-established garden can be difficult to acquire. Lastly, access to resources integrating curricula with the garden is important, and although there are a variety of organizations providing guidance, permanently established curricula set in place by the district or board of education would be a useful complement.

School gardens are not a recent phenomenon in Los Angeles. They have been in existence since the early 1900s and the California Department of Education has been advocating for school gardens since the early 1990s. In Los Angeles County, the approximately 700 school gardens in existence are evidence of the popularity and success of the concept. However, in order to fully provide the stated benefits to their students, a clear and concise programming effort for school gardens must be set in place. Having a permanently set curriculum integrated with school gardens would help with those efforts. As the UCCE has been an advocate for school gardens, and actively involved in school garden projects, they are in an advantageous position to assume this role. At the same time, districts must be encouraged to become more involved and to create fully funded positions for school garden organizers.

THE ECONOMICS AND GEOGRAPHY OF THE ALTADENA FARMERS' MARKET

Hotspot or Not?



CHAPTER HIGHLIGHTS

Research Question

The research presented in this chapter was conducted to understand how the economics and geography of urban entrepreneurs interact in the specific case of Los Angeles County. The research question posed was:

‘ How does urban agriculture fit into the greater economy of Los Angeles?’

This researcher believes that only by understanding the workings of urban entrepreneurs can any economic development policy incorporating urban agriculture be successful.

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About the Researchers

Cultivate L.A. was created by a team of 16 graduate students and 3 instructors at UCLA. This chapter was prepared by Kelly Rytel.

CHAPTER HIGHLIGHTS

Methodology

In order to analyze how urban agriculturists function in today's economy, this researcher studied businesses that sold either *fresh food* or *artisanal food* in an urban setting, specifically defining the terms as:

- **Fresh Food** - Food that is grown and sold with little or no processing. This includes food like lettuce, berries, and avocados.
- **Artisanal Food** - Food products that are processed to create a crafted, edible good. This includes food products like jams, goat cheese, and honey.

This researcher found that the Altadena Farmers' Market (AFM) is actively promoting urban agriculturists, labeled "[sub]urban farmers" at the market, and could therefore serve as the basis for studying the industry of urban agriculture in Los Angeles. Data was collected from 13 semi-structured interviews.

Major Findings

The data collected on vendors through all research methods are summarized in multiple tables within the report, including each vendor and their primary location, goods sold, and approximate miles from the AFM.

The maps displayed on the right are of Los Angeles County and AFM vendors mapped are considered urban entities. Of the 12 artisanal vendors, eight are located in urban areas, as seen on the map below. Of the 13 fresh food vendors, five are located in rural areas.

Vendors in Urban Locations are Innovative

Based on the evidence provided by the vendors at the Altadena Farmers' Market, vendors in urban locations are more likely to be innovative. Vendors either produce novel food items, like duck eggs not usually sold in grocery stores; or produce food in a novel way, like via aquaponics. Aquaponics involves raising fish and growing food in a closed-loop nutrient system; this technique uses 5% of the water used by industrial agriculture.

Fresh Food Vendors Favor Rural Locations; Artisanal Vendors Favor Urban Locations

Based on interviews, rural farmers tend to have larger farms than urban farmers; this researcher concludes that one advantage of farming in a rural area is the ability to utilize internal economies of scale.

Fresh Food Vendors at the Altadena Farmers' Market with Urban Location, Spring 2013



Artisanal Food Vendors at the Altadena Farmers' Market with Urban Location, Spring 2013



Base maps' source: ESRI; data collected by researcher—see *Economics and Geography Appendix* in full report for detailed sources

Recommendations and Future Research

Because of the potential for urban agriculture to benefit from clustering and because there is visible demand at farmers markets for food produced outside the industrial agriculture model, this researcher believes that subsidies that benefit this industry could be helpful to its growth.

Future research could include additional investigation into the community impacts of urban agricultural endeavors such as gardening, urban homesteading, and informal urban markets.

DISTRIBUTION STRATEGIES FOR URBAN FARMERS

How do urban growers distribute their product?

CHAPTER HIGHLIGHTS

Research Question

Just like any industry, urban agriculture has a unique distribution network. Large-scale agriculture and its distribution methods do not work for urban agriculturalists, who may have small amounts of product, be located far away from transportation networks, and wish to preserve the local identity of their food. Urban growers have established their own distribution networks, transporting their products to farmers markets, farm stands, and other retail outlets.

The researchers focused on two questions: "How do urban growers distribute their products?" And: "What, if any, distribution networks are available for these small-scale growers?"



Produce Distribution at the Hollywood Farmers' Market

Photograph by Nicholas Efron Los Angeles, CA

About the Report

The report *Cultivate L.A.: An Assessment of Urban Agriculture in Los Angeles County, June 2013* provides an overview of salient topics related to city-grown food. It was produced to substantially add to the conversation about growing food in Los Angeles. The five chapters of the report present original quantitative data about urban agriculture sites and regulations and original qualitative research about two major groups of urban agriculturalists: school gardens and for-profit food entrepreneurs.

The report and other complementary materials can be accessed at the website <http://cultivatelosangeles.org>.

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About the Researchers

Cultivate LA was created by a team of 16 graduate students and three instructors at UCLA. This chapter was prepared by Nicholas Efron and Zachary Zabel with assistance from Laurel Hunt.

CHAPTER HIGHLIGHTS

Methodology

The research team conducted a series of interviews with urban growers, distributors, grocery markets, and local restaurants in order to gather data about distribution models for urban agriculture. To narrow the focus of the study, the researchers only contacted urban agriculturalists who produced their food within Los Angeles County.

Forty urban farmers, CSAs, distributors, local markets, and restaurants located in Los Angeles County were contacted. The research team attempted to reach to a broad spectrum of growers. Of the 40 entities contacted, 20 responded affirmatively to participate in the research project.

Major Findings

This research did not identify a common distribution network for urban farmers in Los Angeles, but it shed light on what the missing pieces to the puzzle may be. For instance, there appears to be a major disconnect between urban farmers and markets/restaurants that source local food. There are close to 10,000 combined full-service restaurants and grocery stores in Los Angeles County (city-data.com), with more and more marketing their “locally sourced” products. However, as evidenced in researchers’ interviews, seldom do urban farmers sell to restaurants and markets. This is disconcerting considering the proximity of urban growers to such retail outlets. Urban farmers are present at popular farmers markets where many restaurants and markets purchase produce from, such as the Santa Monica Farmers’ Market or Hollywood Farmers’ Market, but are many times overshadowed by larger vendors from rural farms.

Recommendations

The researchers recommend the following courses of action to help urban agriculturalists scale up their distribution and turn their modest businesses into more profitable enterprises:

- Create an “urban agriculture healthy food hub.”
- Implement a coordinated marketing scheme, either with a product identity label identifying city-grown products or a growers’ association for urban farmers.
- Establish a consumer awareness program to help educate shoppers about urban agriculture in Los Angeles.
- Revise city laws and/or zoning codes to allow urban farmers to sell their products on-site.
- Circulate a comprehensive survey to conduct further research on distribution models amongst urban farmers.

Conclusion

No food is more local than that grown in our cities, but distribution opportunities available for urban farmers are far from refined. The creation of a local food hub for urban agriculture can help mitigate distribution issues and costs, save valuable time, and help create robust networks of farmer-customer and farmer-farmer relationships. An urban agriculture food hub, a consumer education campaign, and a city-grown sticker program have the potential to transform urban agriculture into a viable economic activity.



Designed by Jaemi Jackson.