



**THE OHIO STATE UNIVERSITY**

**EEDS Capstone Sustainability Assessment Project**

# Urban Agriculture

Sustainable Healthy Food for Columbus

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**For Questions or Comments**

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## **Executive Summary**

**Purpose of the Research:** The goals of this research are to (i) establish a baseline for Columbus in terms of its sustainable local food production through urban agriculture and (ii) provide targeted recommendations, based on research findings, on how to improve upon this baseline.

**Research Steps:** We collected data from a number of sources to create a baseline measure of urban agriculture that can be used to measure future improvements to the city's overall diversity and quantity of urban agriculture types. We then established key barriers to continued growth through key informant interviews. Finally, we evaluated a set of case studies to locate viable solutions to the barriers identified through our interviews. Finally, we created a list of recommendations for the City of Columbus to use in improving the City's urban agriculture efforts as a whole.

### **Main Findings:**

- The STAR rating system is unclear as to how it defines 'urban agriculture.' This should be addressed by providing clear parameters for defining and measuring urban agriculture. Additionally, the measurements used should be differentially weighted based on the productivity of the particular type of urban agriculture that is included.
- The data reveal that Columbus had strong support and momentum for increasing its urban agriculture through many partnerships and a high level of activity city-wide.
- There are many different organizations working independently instead of working together.

**Recommendations:**

- Improve the City's urban agriculture website to contain updated information, connections to the City's many partners in urban agriculture and interactive tools for reporting plots and requesting zoning information.
- Work with the Ohio State University to brand the city as an innovator in urban agriculture by transforming land in high visibility areas into demonstration gardens that illustrate new techniques for addressing the issues faced in Ohio in creating sustainable agriculture
- Use the examples of successful indoor agriculture from other cities in the region as a jumping off point for working with interested parties in removing obstacles and creating incentives and space to actively participate in more resilient forms of urban agriculture across the city.

## Introduction

Urban agriculture is important to the sustainability of cities for a number of reasons. First, by emphasizing local production of food, spending can be directed back into the local economy. Farms on all scales also contribute by creating jobs for local residents and imparting new skills that grow the industry and increase the community's knowledge base on agricultural techniques. Many gardeners mention that they have recently 'rediscovered' gardening, which may have been abandoned for a generation or even two in their families. This connection to knowledge and skills is kept alive through active participation and each new generation experiences it in its own way.

In addition to economic incentives and knowledge sharing, another key benefit to communities is the access that urban agriculture provides to healthy, fresh food choices that many communities lack. These communities are known as food deserts—communities that typically only have access within walking distance to gas stations, corner shops and fast food outlets. These neighborhoods tend to have the highest rates of diet-related diseases as well. Urban agriculture has the potential to benefit these communities the most, although all communities stand to benefit from the community building interactions by working together to bring life to a thriving local urban agriculture marketplace.

The trade-offs of reducing the carbon footprints of foods that are typically transported cross-country can be difficult to quantify. Nonetheless, there are environmental benefits from reducing the amount of food that is shipped long distances to our city. Additionally, these gardens provide green space and reduce impervious cover, thereby reducing the urban heat island effect and filtering surface runoff.

## **Research Goals**

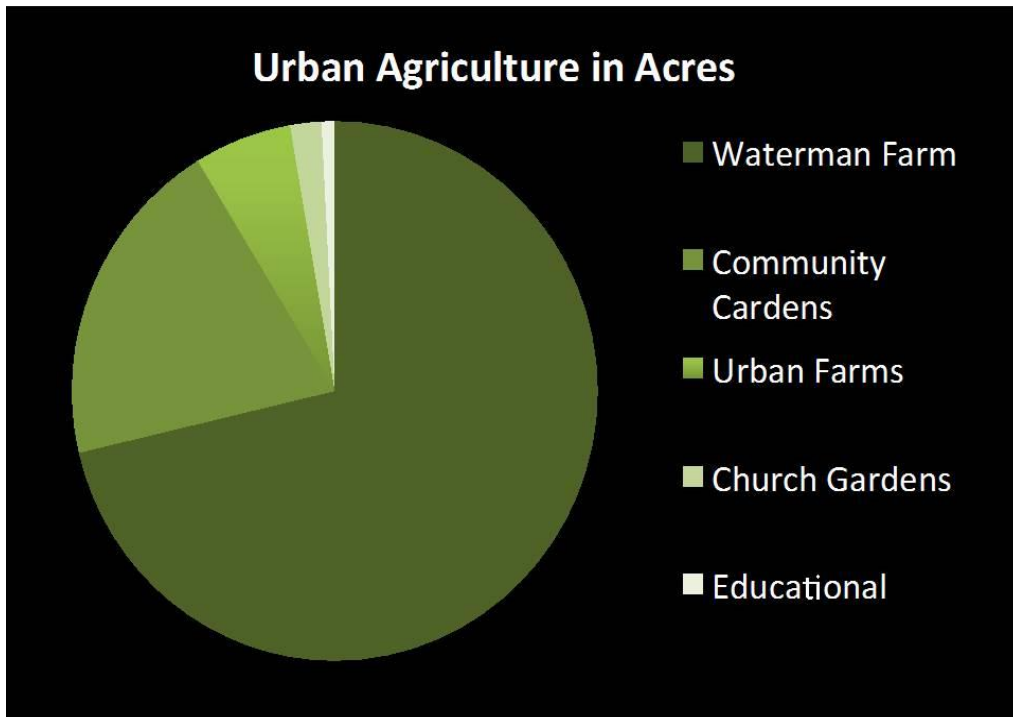
Our first research goal was to establish a baseline quantity of acres of land dedicated to urban agricultural activities within Columbus in order for the City to understand the quantity and location of this land use . Without a baseline, it is impossible to measure improvement, which is what STAR Communities requires to become accredited through its rating system. Specifically the system requires a sustained increase in amount of land dedicated to urban agriculture for three consecutive years of measurement. In addition to this basic requirement, we are interested in how Columbus as a city could establish a more resilient urban agricultural infrastructure, that provides facilities and knowledge that can help urban agriculture activities to adapt to climate change.

## **Research Steps**

We began by gathering data from local sources on existing urban agricultural lands and compiling it into a spreadsheet to establish the needed baseline quantification of space dedicated to urban agriculture. We then proceeded to interview key informants to determine the most common perceived barriers to increasing urban agriculture within the community. Once we had a target, we conducted a benchmarking study to establish some of the best potential strategies that are being used in other cities in the region to address the perceived barriers that we identified. The results are a few targeted recommendations for the City to improve its overall urban agriculture as well as continue to increase the amount of land dedicated to growing food.

## Data Collection

The STAR Communities guidelines are not very precise in terms of defining what constitutes ‘urban agriculture’ nor do they allow the opportunity to include types of agriculture that can’t be accurately measured in acres, such as indoor farming. These facilities do not occupy much space, but are highly productive in comparison to outdoor agriculture. Since in Columbus raising livestock on an urban scale is not practiced within the City, except for the dairy farm at Waterman Farm on the OSU campus, we only included chicken farms within the city limits in terms of animal-based agriculture. This decision is made in order to provide definition and direction for our own efforts and those that may occur subsequent to this project’s completion. Our partners and key sources of data are the Growing Green Program at the Franklin Park Conservatory, the Columbus Office of Land Redevelopment, and the American Community Gardening Association. By collecting and cross-referencing these data, we are able to generate a spreadsheet containing locations, acreage and type of urban agricultural plots. Figure 1 illustrates these data.



*Figure 1: Distribution of urban agriculture acres by type of facility (by Raylee McKinley).*

These results provide the following baseline for Columbus’ urban agriculture: a total of 380 acres of land, which includes Ohio State University’s 261-acre Waterman Farm Complex. The entire table with subtotals of acreage by type is included in Appendix A. In order to attain STAR Communities accreditation, Columbus needs to grow and expand its urban agriculture over a three year period. Of course it will be necessary for the City to continue to track its progress by maintaining an up-to-date database of active farming types throughout the City, which will represent a challenge without a central data management hub to collect these data.

## **Barriers: Community Engagement**

In order for urban agriculture to work, a bottom-up strategy needs to be in place. Community engagement is imperative for getting people interested and ultimately



becoming permanently involved in urban agriculture projects. Finding a champion is important. Ideally, a champion is someone who is trusted and well respected by members of a community. Through mutual respect and trust, a champion is more likely to inspire others to get involved and stay involved. During our interview process, Sarah Lenkay from Mid-Ohio Food Bank identified finding and establishing a champion as a barrier in Columbus. Finding a champion is a challenge in and of itself, in addition to the challenge of sustaining that champion in the long run. Having a key individual is important so that urban agriculture projects remain strong and do not fail. Columbus needs to work on building models for engagement to better serve champions in communities.

During the team's research process, we found an example of a champion who was featured in a PBS production of "Food Forward." Abeni Ramsey is an example of how community engagement can change people's lives as well as encourage urban agriculture involvement. Ramsey is a well-educated and connected mother residing in Oakland, California. In 2008, Ramsey fell onto hard times with the downturn in the economy and had resorted to unhealthy food options because of the wide availability and affordability in her neighborhood. One day the people of City Slicker Farms started selling fresh produce in her community, and helped her start her own vegetable garden in her backyard. In "Food Forward," Ramsey confidently explained, "My transition has been unbelievable. I am the farm manager of Dig Deep Farms and the owner of City Girl Farms" (PBS). Ramsey now inspires and educates others on the importance of fresh food and is a prime example of what a good champion can do for a community and urban agriculture.

## **Barriers: City Code/Zoning**

Columbus is already taking action to promote urban agriculture through the Land Bank Program and Rain Barrel programs. Despite these efforts, other barriers associated with city policies exist. Our research identified that city codes can be a barrier for newcomers wishing to expand agriculture production in residential districts such as Franklinton. Adding exemptions into zoning and city code that would allow for small-scale livestock production in the form of chickens, ducks, rabbits, similar animals and bees would be one way to further urban agriculture in Columbus. The proper restrictions would need to be included to ensure that operations were conducted in a responsible manner, while maintaining clean and healthy neighborhoods. Necessary restrictions such as number of animals, setbacks and fences and enclosures would validate the addition of farm animals in certain residential areas. The City of Cleveland has done a good job of adding exemptions that allow for farm animals in residential areas, while outlining restrictions. Appendix B provides additional details.

The American Planning Association emphasizes three important roles that cities should play to encourage urban agriculture: “1. Include urban agriculture in the planning process as a component of land use and food policy. 2. Establish programs and organizations. 3. Create urban agriculture zoning and permitting processes”. In addition, the Sustainable Cities Institute recommends that cities work with nonprofits, community organizations, markets, farms and government initiatives to develop a city code that is suitable for the city. For example, the Cleveland-Cuyahoga County Food Policy Coalition partners with many city departments including the City of Cleveland’s Office of Sustainability, in order to provide healthy foods across the county.

The City of Cleveland provides a useful example of how zoning laws can be amended to promote urban agriculture. In 2007 Cleveland added an Urban Garden Zoning District; in 2009 it added a “Chicken and Bee” Zoning; and in 2010 added an “Agriculture in Residential Districts” as well as an “Urban Agriculture Overlay District” to steadily increase urban agriculture. In our interview process, people involved in urban agriculture cited that adding exemptions particularly related to livestock options, weeding, and bulk storage would be beneficial. In addition, our interviewees suggested that altering code to allow for the sale of fresh produce in residential areas would be useful. A simple breakdown of Cleveland ordinances can be seen in Appendix B.

## **Barriers: Variable Climate**

With a growing concern over a changing climate, Columbus needs to consider what the future climate of Ohio might look like. According to the IPCC (2014), “Each of the last 3 decades has been successively warmer at Earth’s surface than any preceding decade since 1850. In the Northern Hemisphere, 1983-2012 was likely the warmest 30-year period of the last 1400 years.” Columbus already has a relatively short growing season due to its climate. The Midwest region is expected to experience more intense storm events, especially in terms of harsh winters, as well as more frequent droughts with more extreme temperatures overall. Along with climate uncertainty come concerns over food supply. Given that Ohio is ranked second in the nation in fruit and vegetable processing, a changing climate could have devastating effects on both food supply and the economy. The Buckeye State should consider indoor urban agriculture ventures as a mitigation strategy to climate change.

## **Case Studies**

For the purpose of this report, we focused on current urban agriculture projects happening across the country that we found to be effective at increasing local food supply. Upon researching these urban agriculture sites, we chose four that could be plausible for implementation in the Columbus area.

### **Green City Growers Cooperative, Cleveland, Ohio**

We began by looking into Cleveland after talking to people involved in Columbus urban agriculture recommended we do so. Cleveland is presently going through economic decline as well as population loss; its population has decreased from a peak of 914,808 in 1950 to 396,815 as of 2010 (Schuering, 2010). Incorporating urban agriculture into the fabric of industrial cities is one way that cities can adapt to population flight. As many industrial cities struggle with emigration of population, urban agriculture is one option to dealing with and adapting to a shrinking city.

Cleveland is home to the largest urban greenhouse in the United States, the Green City Growers Cooperative (GCGC), shown in Figure 2. The GCGC is located in a central area of Cleveland, known as the Greater University Circle. It is a state-of-the-art 3.25 acre greenhouse that uses a floating hydroponic system to produce about ‘3 million heads of lettuce and three hundred thousand pounds of herbs every year’. The greenhouse is 15,000 square feet, which includes packinghouse and office space.

The GCGC was made possible by the Evergreen Cooperatives, which was established in 2008 by various Cleveland based institutions in an attempt to transform the economy in poverty stricken areas by providing areas with worker owned cooperatives.

The City of Cleveland and its Mayor Frank G. Jackson were one of the first supporters of GCGC, and as a result the City of Cleveland was the first to receive Federal and State grants for the development of urban agriculture. The venture is a collaborative public-private-nonprofit partnership. Senator Sherrod Brown helped secure \$10 million from the U.S. Department of Housing and Urban Development for GCGC, in addition to awarding tax credits. The GCGC not only provides jobs and food to the local community, but also partners with local restaurants and grocery stores to spread their produce within a 150-mile radius of Cleveland.

Columbus' population trend is not at all like Cleveland; it has been on the rise with a current population of around 809,798. But according to the City of Columbus Land Bank Website, Columbus currently has 427 abandoned lots listed for sale, some of which could easily be converted into urban agriculture projects. An increase in population comes with an increased demand for fresh food, and with a changing climate it is imperative that Columbus take preventative measures to ensure food demand is met today and in the future.



*Figure 2: GCGC 3.25-acre indoor hydroponic system. (National Development Council)*

## **Sweet Water Organics, Milwaukee, Wisconsin and Chicago, Illinois**

Sweet Water Organics is an example of repurposing a vacant structure for urban agriculture. It was an abandoned crane factory in Milwaukee, Wisconsin that was converted into an urban fish and vegetable aquaponics farm in 2008. Aquaponics is the combination of aquaculture and hydroponics. The process is a symbiotic, cyclical one, in which the fish naturally fertilize the water with their waste, which is then transferred to a settling area where the ammonia is converted by worms and microbes into nitrates; that fertilized water is then transferred to the plants, which naturally filter the water back to the fish tank.

## How aquaponics works

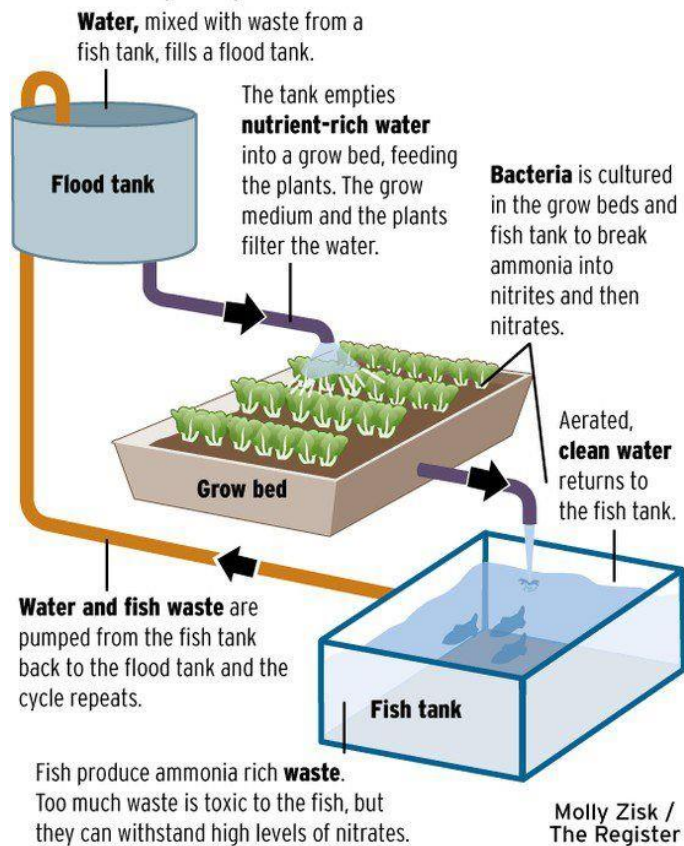


Figure 3: Simplified version of how aquaponics works. (Open Source Aquaponics) from Zisk, M. (2013)

After Sweet Water Organics was initially started, the City of Milwaukee gave the organization a city loan from the city's Development Fund of \$250,000. The loan is entirely forgivable if the organization meets yearly job creation targets, with the end goal of 40 jobs in 4 years. If the yearly goals are not attained, Sweet Water is penalized and has to pay back a percentage of the loan.

The company transitioned from a for-profit into a nonprofit and is now run by the Sweet Water Foundation (SWF), which has locations both in Chicago, IL and Milwaukee, WI. SWF focuses on innovative education, as well as using urban agriculture as 'a vehicle of community development' by turning waste into a community

resource. The structure contains 34 aquaponics systems that produce about 7,500 fish (perch and tilapia varieties) every week in addition to a large variety of lettuces, herbs and vegetables. SWF partners with many universities, businesses and people predominately in Milwaukee, WI and Chicago, IL but also with national and international organizations.

Sweet Water Foundation has Innovation Centers and Hubs that they use to educate people on aquaponics, and urban agriculture. In the 2012-2013 year, the organization grew 5,000 pounds of vegetables and 7,000 pounds of fish, installed 30 aquaponics systems in homes and schools in 5 U.S. cities and presented at 15 conferences internationally (SWF, Annual Report). The foundation now has a second branch in the South Side of Chicago, in which it collaborated with the University of Chicago to build another educational aquaponics center in an abandoned shoe factory. These two urban fish and vegetable farms provide sustainable food sources for their local communities by partnering with restaurants, schools, farmers markets and food banks. They also provide jobs to the local communities as well, which keeps the money and food in the local economy.

We believe that implementing an urban aquaponics operation in Columbus is completely plausible in one of the various vacant buildings within the city. According to Fresh Harvest Farm, aquaponics use 2% of the water and 70-90% of the energy traditional farming requires. Fresh Harvest Farm is an aquaponics farm located in Richwood, Ohio that sells products at farmer's markets and restaurant in Columbus. In an article by Ohio's Country Journal, owner of the farm, Jeni Blackburn explains that the demand is there, "We can't supply our demand. We have had to turn customers away. We



have so many people who want local, pesticide-free fresh produce”. This leads us to believe that now is the perfect time for Columbus to help fill the gap and meet demand.

## **Recommendations**

### **Website and Central Data Hub**

Columbus has information for prospective gardeners on its website. However this webpage could become a resource for more than just community gardeners. As interest and demand to participate in urban agriculture increases, residents will increasingly need a robust and user-friendly interface with which to learn about available options. We have the following specific recommendations for improving the website. The website could become a ‘central data hub’ that brings all the information on what is happening in the urban gardening community with up to date events, contact information for partners working on local food in Columbus, links to their websites and a interactive interface that allows users to voice concerns and report urban agriculture that isn’t on the list yet. The City could easily use this information to update the Public Health Office’s food mapping website and to generate data on its total acreage. Specifically, links to OSU’s Extension offices and up-to-date contact information for appropriate zoning personnel in the case of starting a new farm or urban agriculture activity would be very useful to newcomers and established farmers alike. There might be a way to link all these things together on the City’s urban agriculture web page as well. Since zoning and food safety were issues that were raised during our investigation into barriers to urban agriculture, links to appropriate contacts and resources in these areas within the City’s staff or community partners would also be very beneficial. Finally, by highlighting recent and coming developments and

ways to get involved with an events calendar, the City could encourage a great deal more enthusiasm and community buy-in to these initiatives, which as we pointed out in the barriers section, is critical to keeping urban agriculture going.

## **Demonstration Gardens**

The City of Columbus has an excellent resource in The Ohio State University. The University was founded as an agricultural college and continues to this day to have a very strong presence within the agricultural research and educational universities with new and innovative projects and research continually taking place both on campus and in surrounding communities. The University has participated in community outreach since its inception. Its most recent collaborations include the Weinland Park Food District and Local Food Hub, which is collaboration with the Knowlton School of Architecture. With a strong center of innovation and outreach like the University, the City and its partners could work together to make possible the development of a number of demonstration gardens that could define the City of Columbus as a hive of innovation. The demonstration gardens could inspire local residents to use the innovative techniques featured in the them, including: incorporating storm-water retention and infiltration, planting perennial fruit trees and shrubs, creating “food forests” or permaculture gardens, and providing solutions for gardening on vacant lots, parking lots, small spaces, and indoors. The team saw potential to start these gardens around the campus area and spread into the local communities, creating an urban agriculture system that could be toured during special events that highlight local food.

## Conclusion

Team Urban Agriculture finds that Columbus has strong potential to attain STAR Communities accreditation in the area of urban agriculture. With a baseline of how much land is dedicated and a system for collecting further data, Columbus can capture the momentum it currently has in this area. We would make a case to the STAR Communities administrators to consider weighing elements of a city's urban agriculture system that improve productivity by providing infrastructure in addition to acreage, such as indoor aquaponics and greenhouses, food processing and distribution hubs, and demonstration gardens. We discovered that these forms of agriculture stand to contribute more value to the community than a simple metric of acreage. We also see the potential for Columbus to easily attain additional points for innovation, which are included in the appendices of the STAR Communities rating guide and represent a substantial gain in points for the city, by encouraging partnership with the Ohio State University.

Urban agriculture reaches the City's most vulnerable residents. It connects communities as well as supports the health and recreation of all residents living within its neighborhoods. Community gardening has always been a strong point for the City of Columbus. By expanding its activities and becoming more resilient, the City will define itself as a strong, healthy and innovative community.

## References

- "Cleveland City Planning Commission." *Cleveland City Planning Commission*. City of Cleveland, n.d. Web. 20 Apr. 2014. <<http://planning.city.cleveland.oh.us>>.
- Green City Grower Cooperative. (n.d.). *Evergreen Cooperatives*. Retrieved March 3, 2014, from <http://evergreencooperatives.com/business/green-city-growers/our-products/>
- Husted, Kristofor. "Seattle's First Urban Food Forest Will Be Open To Foragers." *NPR*. NPR, 1 Mar. 2012. Web. 20 Mar. 2014. <<http://www.npr.org/blogs/thesalt/2012/02/29/147668557/seattles-first-urban-food-forest-will-be-free-to-forage>>.
- Nation's Largest Urban Food Production Greenhouse Officially Opens in Cleveland. (2013, February 25). *The Cleveland Foundation*. Retrieved April 27, 2014, from [http://www.clevelandfoundation.org/news\\_items/12501/](http://www.clevelandfoundation.org/news_items/12501/)
- Nation's Largest Food Production Greenhouse Officially Opens in Cleveland's Central Neighborhood . (2013, March 1). *National Development Council Blog RSS*. Retrieved March 4, 2014, from <http://nationaldevelopmentcouncil.org/blog/?p=2561>
- "Promoting Urban Agriculture Through Zoning." *Urban Agriculture*. National League of Cities Sustainable Cities Institute, n.d. Web. 2 Apr. 2014. <<http://www.sustainablecitiesinstitute.org/topics/food-systems/urban-agriculture/promoting-urban-agriculture-through-zoning>>.
- Reese, Matt. "Aquaponics Combines Fish and Crops for a Productive Retirement." *Ohio's Country Journal* (2013): *Ohio's Country Journal*. Ohio Ag Net, 10 Oct. 2013. Web.
- Roden, G., Greene, B., & Holbrook, S. (2012). Urban Agriculture Across America [Television series episode]. In *Food Forward*. New York: PBS.
- Schuering, E. "Perennial Growth" in a Shrinking City: A Case Study of Urban Agriculture Policy and Planning in Cleveland, Ohio. (2011, November). DePaul University.
- "Sweet Water Foundation." *Sweet Water Foundation*. Sweet Water Foundation, n.d. Web. 20 Mar. 2014. <<http://sweetwaterfoundation.com>>.
- Timm, Michael. "Fish Farm Creates Jobs With City Help." *The Bay View Compass*. Bay View Compass, 30 Dec. 2011. Web. 27 Mar. 2014. <<http://bayviewcompass.com/fish-farm-creates-jobs-with-city-help/>>.

"Vision, Mission & Goals." *Cleveland-Cuyahoga County Food Policy Coalition*. N.p., n.d. Web. 15 Apr. 2014. <<http://cccfoodpolicy.org/vision-mission-goals>>.

"What is Aquaponics?." *Fresh Harvest Farm*. N.p., n.d. Web. 26 Mar. 2014. <<http://www.freshharvestfarmllc.com>>.

The American Community Gardening Association website:

## Appendix A: Urban Agriculture Quantification for Columbus, OH

Key sources of data: Growing Green Program at the Franklin Park Conservatory, Columbus Office of Land Redevelopment, American Community Gardening Association

| TYPE of Garden | PROJECT NAME   | Garden Address   | ZIP   | garden size (Acres) |
|----------------|--|--|-------|---------------------|
| Church         | Youth Vegetable Garden and Flower Gardens/Neeighborhood Beautification | 640 South Ohio Ave.  | 43205 | 0.002               |
| Church         | Mt Vernon Ave, AME Church Communtiy Garden                             | 279 N. 22nd Street   |       | 0.13                |
| Church         | Peace + Plenty Community Garden  | 4295 E Broad   | 43213 | 0.12                |
| Church         | Courtyard Garden Patch   | 1450 E Dublin-Granville Rd                                 | 43229 | 0.006               |
| Church         | Smoky Row Community Garden   | 7260 Smoky Row   | 43235 | 0.02                |
| Church         | Living Vine Community Garden   | 4142 Westerville Rd. (corner of Morse and Westerville Rd.) |       | 0.03                |
| Church         | Community Garden   | Madison & Latta  |       | 0.03                |
| Church         | Emmanuel Chin Community Garden   | Gantz Rd   |       | 0.21                |
| Church         | Cypress Wesleyan Church Community Garden                               | 377 Alton-Darby Creek Rd,                                  | 43204 | 0.23                |
| Church         | The Growing Place  | 151 Avondale Ave   |       | 0.35                |
| Church         | Garden of Eating   | 225 Schoolhouse lane                                       | 43228 |                     |
| Church         | Vines of Life  | 28 N. Terrace Ave  | 43204 | 0.14                |
| Church         | Cypress Wesleyan Church Communtiy Garden                               | 377 Alton Darby Creek Rd,                                  | 43119 | 0.17                |
| Church         |  | 5442 Sunbury Road  | 43230 | 0.23                |
| Church         | St James Community Garden  | dalawn& Huy Rd - Back of St James the Less Church          |       | 0.42                |

|               |   |  |        |       |
|---------------|---|--|--------|-------|
| Church garden | Buckeye Lake-Water' Edge  | 4852 Walnut Rd.<br>Buckeye Lake                        | 43025  | 0.002 |
| Church garden | Bethany Outreach Community Garden                                     | 1130 E. Livingston Avenue                              | 43205  | 0.01  |
| Church garden | Extending the Table - Maple Grove                                     | 7 W. Henderson Rd.                                     | 43214  | 0.01  |
| Church garden | Hope Lutheran Church  | 820 Lilley Ave.  | 43205  | 0.02  |
| Church garden | Lutheran Ascension Church Community Garden                            | Lutheran Ascension Church, Morse RD                    | 43229  | 0.03  |
| Church garden | East Baptist Church/ Peace & Plenty                                   | 4295 E. Broad St                                       | 43213  | 0.05  |
| Church Garden |   | NE Corner of S 22nd and Carpenter                      |        | 0.035 |
| Church garden | Seeds of Hope community garden  | 2070 Ridgecliff rd                                     |        | 0.05  |
| Church garden |   | New Hope Church<br>4739 W. Powell Rd                   | 43065  | 0.06  |
| Church garden | Northwold-Production Garden   | 2511 Northwold Drive                                   | 43231  | 0.3   |
| Church garden | Family Life Garden  | 2875 E. Livingston Avenue                              | 43209  | 0.07  |
| Church garden | From the Ground Up  | 1000 Atcheson Avenue                                   | 43203  | 0.076 |
| Church garden | Growing Tomorrow  | 2833 Valley View Drive                                 | 43204  | 0.095 |
| Church garden | Epworth Church's Veggie Garden or Christian Assembly Community Garden | 5100 Karl Road   | 43229  | 0.11  |
| Church garden | Messiah Lutheran Church   | 1200 Waggoner Rd                                       | 43068f | 0.12  |
| Church garden | Grace Place Comm Garden   | NE.of East 6th ave & Gould beside<br>3050 East 6th ave | 43219  | 0.14  |

|               |  |   |       |       |
|---------------|--|---|-------|-------|
| Church garden | Good Seeds Community Garden                | Corner of Sharon Woods & Beechcroft Rd                                  | 43229 | 0.34  |
| Church garden | Three Sisters Garden                       | 11239 Fancher Rd  | 43082 | 0.34  |
| Church garden | The Church of the Redeemer Moravian Church | 3883 Summitview Road  | 43016 | 3     |
| Church Garden |  | 2303 N. Cassady Avenue  |       |       |
| Church garden | KIPP Journey and new walk garden           | 1406 Myrtle Ave   | 43211 | 0.057 |
|               |  |   |       | 7.003 |
| Community     | Arc West Therapy Garden                    | Arc Industries West, 250 W. Dodridge Rd.                                |       | 0.008 |
| Community     | Urban Alchemy Garden                       | 997 Carpenter St  |       | 0.1   |
| Community     | Foster Jennings Community Garden           | 1779 East Maynard Avenue  | 43219 | 0.023 |
| Community     | Heritage North Community Garden            | 1700 Dublin Granville Road  | 43229 | 0.148 |
| community     | NNEMAP Pantry Garden                       | 1064 N. High St., Columbus, Oh 43201                                    | 43201 | 0.002 |
| Community     | Growing Wellness Garden at CarePoint East  | 543 Taylor Ave, behind CarePoint East                                   | 43203 | 0.003 |
| community     | Dodd's Garden                              | 480 Medical Center  |       | 0.004 |
| Community     | OutBack                                    | 14 W. Lakeview, behind the CRC  |       | 0.005 |
| community     | Alvis house Garden                         | 624 South Ohio Ave  | 43205 | 0.006 |
| Community     | Corner Stone                               |   |       | 0.01  |
| Community     | Garden of Eatin'                           | corner of Calumet & Oakland Park, behind St. James Episcopal Church     |       | 0.01  |
| Community     | Three Rivers Civic Association             | 1 at Elk Run Park, 2 at Hendron Rd. & Williams, 2 at three Rivers Dr. & | 43125 | 0.01  |



|           |   |   |       |       |
|-----------|---|---|-------|-------|
|           |   | Williams Rd   |       |       |
| Community | Three Rivers Civic Association Beauty Gardens                         | Three Rivers Dr and Williams, Hendron and Williams rd |       | 0.01  |
| Community | Sprouting Goodwill Garden   | 1331 Edgehill Rd                                      | 43212 | 0.03  |
| Community | New Albany Community garden   | 20 Village hall Road                                  |       | 0.03  |
| Community | Garden of Love  | Cherry St & 22nd Street                               | 43205 | 0.03  |
| community | Whitehall Community Garden  | Whitehall Senior Center 4924 Etna Road                |       | 0.038 |
| Community | MidGarden   | 619 Midgard (where it intersects the railroad tracks) |       | 0.05  |
| Community | South Side Garden (formerly South Side Settlement House (SSSH) Garden | between Innis & Woodrow Ave. on Stanford              | 43207 | 0.06  |
| Community | no name yet'  | 1200 Waggoner Rd                                      | 43068 | 0.062 |
| community | Indianola - Euclid Garden   | Euclid and Indianola                                  |       | 0.09  |
| community | Old Freedom   | 913 E. Mound St.                                      | 43205 | 1.2   |
| Community | NOBO Community Garden   | 279 N. 22nd St  | 43203 | 0.12  |
| Community | Champion Community Garden   | 490 S. Champion Ave                                   | 43205 | 0.13  |
| Community | Garden of Communion   | 1101 Bryden Rd.                                       |       | 0.125 |

|           |  |   |       |       |
|-----------|--|---|-------|-------|
| community | Bible Way Church/ SKIP<br>Communtiy Garden | Sullivant and<br>Highland Ave                               |       | 0.16  |
| Community | Florencia Gardens                          | 444, 446 N. Garfield<br>Ave                                 | 43263 | 0.17  |
| Community | Florencia Gardens                          | 444-446 N. Garfield<br>Ave., 456-458 N.<br>Garfield Ave.    |       | 0.18  |
| community | Garden of Justice                          | 308 Carpenter St.   |       | 0.185 |
| community | Civic Community Gardens                    | Civic Park<br>Community Garden                              |       | 0.2   |
| community | Livingston Community<br>Gardens            | Livingston Ave,<br>Reynoldsburg,<br>behind Truro Twp.<br>FD |       | 0.2   |
| Community | Communtiy Garden                           | 591 Stone Ave   |       | 0.2   |
| Community | Sunflower Alley                            | NW corner of<br>Bryden & Ohio Ave                           | 43205 | 0.2   |
| Community | Wilson                                     | Wilson, 1/2 block<br>north of Main St. on<br>the west side  |       | 0.22  |
| Community | Shepard Community Garden                   | Corner of Margaret<br>Ave and Walcutt<br>Ave                |       | 0.25  |
| Community | Gardens At Cnetral College                 | West on North<br>Street at Sunbury<br>road                  |       | 0.5   |
| Community | Franklinton Gardens                        | Franklinton (multiple<br>sites)                             |       | 1.25  |
| community | New Freedom                                | 913 E. Mound St. at<br>Carpenter                            |       | 0.13  |
| Community | ARC North                                  | 6633 Doubletree   | 43229 | 0.009 |
| community | Sensory Garden                             | Northwest library,<br>2280 Hard rd                          | 43235 |       |

|                  |  |   |       |        |
|------------------|--|---|-------|--------|
| Community        | YMCA North Branch                          | 1640 Sandalwood Place                                       | 43229 |        |
| Community        | Milo Garden                                | 847 E. 3rd Ave  | 43201 | 0.023  |
| Community        | Garden Center                              | 900 Harvey Ct   |       | 0.04   |
| Community        | Otterbein Community Garden                 | 600 N Spring Rd.  | 43081 | 0.3    |
| Community Garden | Whitehall Community Garden                 | 4924 Etna Rd.   | 43213 | 0.001  |
| Community Garden | Summit on 16th Friends and Family Garden   | 82 D 16th Ave   | 43201 | 0.003  |
| Community Garden | Love and Learn Gardens                     | Union County Agriculture Building                           | 43017 | 0.0036 |
| Community Garden | Enter City Garden "The Learning Place"     | 420 South Wheatland Avenue                                  | 43204 | 0.005  |
| Community Garden | The Lytham                                 | Lytham Rd   |       | 0.0058 |
| Community Garden | Holton Gardens                             | Holton Recreation Center located at 303 North Eureka Avenue | 43204 | 0.006  |
| Community Garden | Hope Grows                                 | 130 Woodland Ave  | 43203 | 0.0066 |
| Community Garden | Hope Grows                                 | 914 E 13th ave  | 43211 | 0.0068 |
| Community Garden | German Village Comm Garden                 | Livingston united methodist church                          | 43215 | 0.009  |
| Community Garden | Southfield Comm. Missionary Baptist Church | 1399 augmount Ave   | 43207 | 0.009  |
| Community Garden | Jefferson Jewel Garden:Rooted in Pride     | 51 Jefferson Ave  | 43215 | 0.012  |
| Community Garden | Miss Lilley                                | 1736 Bryderl Rd (rear)                                      | 43205 | 0.014  |

|                  |  |  |       |       |
|------------------|--|--|-------|-------|
| Community Garden |  |  | 43209 | 0.35  |
| Community Garden | Livingston Gardens                               | 3341 E Livingston Ave                                  | 43227 | 0.015 |
| Community Garden | Outdoor Learning Center Farm Garden              | 2879 Johnstown Road                                    | 43011 | 0.017 |
| Community Garden | Homestead @ the Preserve                         | Morse and Hamilton RD                                  | 43230 | 0.018 |
| Community Garden | Ganthers Place Park for all People               | 562 Reinhard Avenue                                    | 43206 | 0.08  |
| Community Garden | Huckleberry House                                | 72 East 6th  | 43201 | 0.024 |
| Community Garden | Fruit of the Vine                                | 171 E. 5th Ave.  | 43201 | 0.03  |
| Community Garden | Southpoint Community Garden                      | 4135/4111 Southpoint Blvd                              | 43207 | 0.034 |
| Community Garden | The Family Garden (a.k.a. Minnie's Pepper Patch) | 369-371 Wilson Avenue, E. Side                         | 43205 | 0.035 |
| Community Garden | Helping Hands Community Garden                   | 2500 Medary Avenue                                     | 43202 | 0.04  |
| Community Garden | Minerva Park Community Garden                    | Hawthorne School off RT 161                            | 43231 | 0.04  |
| Community Garden | Polaris Employee Garden                          | McCoy Center at Polaris, 1111 Polaris Parkway          | 43035 | 0.043 |
| Community Garden | Washington Beach Comm Garden                     | 2500 Medary Avenue/ Helping Hands center               |       | 0.05  |
| Community Garden | Garden For All People                            | Southeast corner of East Kossuth Street and Ann Street | 43206 | 0.056 |
| Community Garden | Nola Tech Garden                                 | 420 East 19th Avenue, In field north of school         | 43201 | 0.059 |
| Community Garden | Mary Simons Community Garden                     | Stewart Avenue and Heyl Avenue                         | 43206 | 0.06  |

|                  |                                      |   |       |       |
|------------------|--------------------------------------|---|-------|-------|
| Community Garden | Garden of Champion                   | Corner of South Champion Avenue and East Mound Street | 43205 | 0.06  |
| Community Garden | Epworth Veggie Garden                | 5100 Karl Road  | 43229 | 0.064 |
| Community Garden | Threshold Community Garden           | 4099 Karl Rd  | 43224 | 0.064 |
| Community Garden | Marysville community Garden          | Avondale Ave  |       | 0.069 |
| Community Garden | East Fifth Avenue Apartments         | 3005 East 5th Avenue                                  | 43219 | 0.072 |
| Community Garden | NAICCO community garden              | 67 East Innis Avenue                                  | 43207 | 0.073 |
| Community Garden | Stoddart Ave Comm. Garden            | 445-51 Stoddart Ave                                   | 43205 | 0.14  |
| Community Garden | Horn of Africa Garden                | 2154 Eddystone Ave                                    | 43224 | 0.087 |
| Community Garden | Each One Teach One                   | 3500 First Ave,                                       | 43123 | 0.09  |
| Community Garden | Kingdom Bussiness Southfields        | 1399 augmont Rd, 637 Stambaugh                        | 43207 | 0.09  |
| Community Garden | Kongdom Bussiness Southfields        | 503 Glendower   | 43207 | 0.13  |
| Community Garden | Beauty From Within                   | 453 North 20th Street, behind church                  | 43203 | 0.098 |
| Community Garden | Highland West Community Gardens      | 29-31 N Wheatland Ave                                 | 43204 | 0.1   |
| Community Garden | Kongdom Bussiness Southfields        | 637 Stambaugh   | 43207 | 0.1   |
| Community Garden | Each One Teach One                   | 3500 First Ave.                                       | 43123 | 0.1   |
| Community Garden |                                      | 1379-1381 N 4th St                                    | 43201 | 0.106 |
| Community Garden | Livingston Community Garden          | Merchants Drive                                       | 43068 | 0.11  |
| Community Garden | NECKO Neighborhood Community Gardens | Perry St Alley/ behing Creative Living                | 43235 | 0.112 |

|                  |                                   |   |       |       |
|------------------|-----------------------------------|---|-------|-------|
| Community Garden | Weinland park Community Garden    | 303 E. 6th ave  | 43201 | 0.125 |
| Community Garden | Olde Towne Community Garden       | Corner of Oak & Garfield (East of Parsons)                                      | 43205 | 0.13  |
| Community Garden | Jezreel Garden                    | 123 W park Ave  | 43222 | 0.15  |
| Community Garden | East Columbus Community Garden    | 854 Alton Avenue  | 43219 | 0.169 |
| Community Garden | Juvenile Offenders Garden         | 490 South Champion Avenue (Near East Fulton)                                    | 43205 | 0.17  |
| Community Garden | Jazzy Green                       | King Arts Complex, 867 Mt. Vernon Ave.  |       | 0.18  |
| Community Garden | none yet                          | Old Leonard & Parwood   | 43219 | 0.19  |
| Community Garden | Vineyard Columbus                 | 6000 Cooper Rd  | 43081 | 0.19  |
| Community Garden | Harveys Place                     | 909 w Rich st   | 43222 | 0.2   |
| Community Garden | AASAC Garden                      | 1675 Arlington Ave.   | 43211 | 0.5   |
| Community Garden | North of Broad Community Garden   | 279 N. 22nd Street  |       | 0.22  |
| Community Garden | Lutheran Church garden            | 2300 Mill Run Drive   | 43026 | 0.229 |
| Community Garden | Bexley Community Garden           | Frendale Dr. South West Bexley  | 43209 | 0.24  |
| Community Garden | American Addition Learning Garden | 1362 Sigsbee Ave  | 43219 | 0.25  |
| Community Garden | Trinity gardens                   | 107 Jefferson st.   | 43215 | 0.25  |
| community Garden | Hooper Farm-Tremont Green Ave     | 2835 W 11th Ave   | 43219 | 0.284 |
| Community Garden | East Meets West Community Garden  | 1810 E. 25th Avenue   | 43219 | 0.3   |
| Community Garden | South Side Planters               | 300 Stanaford Place (Behind South Side Settlement House, North of Innis Avenue) | 43207 | 0.33  |

|                  |   |  |       |      |
|------------------|---|--|-------|------|
| Community Garden | The Renaissance Garden                                  | 2364 W. Mound St.  | 43204 | 0.41 |
| Community Garden | Bexley Community Garden                                 | Livingston and Ferndale in Bexley  | 43209 | 0.46 |
| Community Garden | Pickerington Community Garden                           | none given   |       | 0.5  |
| Community Garden | St Johns Garden   | Avondale Ave   | 43222 | 0.5  |
| Community Garden | Highland Ave. Community Garden                          | 67-71 S. Highland Ave.   | 43204 | 0.5  |
| Community Garden | Worthington Community Gardens                           | 345 E Wilson Bridge Rd   | 43085 | 0.5  |
| Community Garden | Garden X  | Corner of Gilbert Street and East Fulton Street                              | 43205 | 0.61 |
| Community Garden | Hills Community Garden                                  | 5567 Sinclair Road   |       | 0.64 |
| Community Garden |   | 4065 Kenny Rd  | 43220 | 0.65 |
| Community Garden | Franklin Park Community Garden                          | 1777 East Broad Street (South of Main Building)                              | 43205 | 0.67 |
| Community Garden | South 6th Street Community Garden                       | South 6th Street   | 43215 | 1.14 |
| Community Garden | Buckeye Village Garden                                  | Ackerman Road (Between 315 & Olentangy)                                      | 43085 | 1.35 |
| Community Garden | Mlound Street Community Garden                          | Corner of Mound st and 4th st (downtown behind Jury Room                     | 43223 | 1.5  |
| Community Garden | Wallace Gardens   | 1581 West Goodale Boulevard (Corner of Grandview Avenue & Goodale Boulevard) | 43212 | 1.56 |
| Community Garden | Three Acres for Three Sisters                           |  |       | 3    |
| Community Garden | Mid-Ohio Foodbank Comm Garden                           | Mid Ohio foodbank  | 43223 | 7    |
| Community Garden | The Edible Landscape Garden (Old First Church- Phase 2) | 1101 Bryden Road   | 43205 | 1    |
| Community Garden | Ama Vera's Garden                                       | 2400 Block fo Cleveland Ave / 1 block N. Myrtle between Arlington & Myrtle   | 43212 | 2.5  |

|                  |  |   |       |      |
|------------------|--|---|-------|------|
| Community Garden | Shepherds Corner Ecology Center                              | 987 North Waggoner Road   | 43004 | 4    |
| Community Garden | Berwyn East / Barnett Recreation Center                      | 1184 Barnett Rd.  | 43227 |      |
| Community Garden |  | 1134 Mt. Vernon Ave.  | 43203 | 0.09 |
| Community Garden | Community Green House Project                                | 1150 E. Main Street   | 43205 |      |
| Community Garden | City Hall Community Garden                                   | 120 W Gay St  | 43215 |      |
| Community Garden | The Forum at Knights Bridge                                  | 4590 Knightsbridge Boulevard (The Forum at Knightsbridge)           |       |      |
| Community Garden | Driving PWC Community Garden                                 | 712 Bulen Avenue  | 43205 |      |
| Community Garden | The Giving Garden  | 2593 N. High Street   | 43202 |      |
| Community Garden | Frank Fetch Park   | 200th Block of East Beck Street (Between 5th Street and 6th Street) | 43206 |      |
| Community Garden | Indian Mound Green Space Beautification and Learning Project | 3901 Parsons Ave.   | 43207 |      |
| Community Garden |  | TBD   |       |      |
| Community Garden | Merry Garten   | corner of Stewart & Heyl  | 43206 |      |
| Community Garden |  | 1235 Northwest Blvd.  | 43212 |      |
| Community Garden | Shannon Road Farm  | Shannon Road  |       |      |
| Community Garden | Israel Initiative Incorporated                               | Multiple in Columbus and abroad in Rwanda & Israel                  |       |      |
| Community Garden | Hilltop Farmers of Tomorrow                                  | 66 Highland Ave   | 43085 |      |
| Community Garden | Nationwide Children Hosp Comm Garden                         | Nationwide Children Hosp  |       |      |
| Community Garden | Peace In a Pod Organic Gardens                               | New Albany  |       |      |
| Community Garden |  | On School grounds   |       |      |
| Community Garden | Village Green  | 1824 N.High st  | 43201 |      |



|                  |   |  |       |       |
|------------------|---|--|-------|-------|
| Community Garden | Growing Hearts and Hands                                | 1536 Oak St  | 43205 | 0.14  |
| Community Garden | Heat of Hague Community Garden                          | 204 S. Hague   |       | 0.18  |
| Community Garden | Franklin County Juvenile court Garden                   | 490 S. Champion Ave  | 43205 | 0.11  |
| Community Garden | AnaHata Food Project                                    | 7657 Feder Rd/ Just this farm                              | 43119 | 0.137 |
| Community Garden | Living Vine Community Garden                            | 4142 Westerville Rd  | 43224 | 0.15  |
| Community Garden |   | 530 McNaughton Road  | 43213 | 0.64  |
| Community garden | Horn of Africa Communtiy Garden                         | 2154 Eddystone   | 43224 | 0.5   |
| Community Garden | Fairfield County Community Gardens                      | 22 acres in Lancaster and small church & family plots      | 43130 | 22    |
| Community Garden | The Herb Patch  | Linwood Avenue (1/2 block north of East Main Street)       | 43205 |       |
| Community Garden | The Oakwood Patch                                       | Oakwood Avenue (1/2 block north of East Livingston Avenue) | 43205 |       |
| Community Garden | Vegetables Gardens in the Neighborhood of Weinland park |  |       |       |
| Community Garden |   | 1114 Mt. Vernon Avenue                                     |       | 0.1   |
| Community Garden |   | 1548 Oak Street  |       | 0.13  |
| Community Garden |   | 1590 Tiffin Street   |       | 0.08  |
| Community Garden |   | 2455-2457 Cleveland Avenue                                 |       | 0.28  |
| Community Garden |   | Toni Street  |       | 0.26  |

|                  |  |                            |  |      |
|------------------|--|----------------------------|--|------|
| Community Garden |  | 1012 Sullivant Avenue      |  | 0.05 |
| Community Garden |  | 1455 N. 4th Street         |  | 0.08 |
| Community Garden |  | 156 N. 21st Street         |  | 0.09 |
| Community Garden |  | 482-484 Taylor Avenue      |  | 0.09 |
| Community Garden |  | 502-504 Taylor Avenue      |  | 0.11 |
| Community Garden |  | 490 Taylor Avenue          |  | 0.14 |
| Community Garden |  | 494-500 Taylor Avenue      |  | 0.14 |
| Community Garden |  | 478 Taylor Avenue          |  | 0.1  |
| Community Garden |  | 1399 Gault Street          |  | 0.2  |
| Community Garden |  | 1111-1113 E. 16th Avenue   |  | 0.09 |
| Community Garden |  | 1124 E. Rich Street        |  | 0.12 |
| Community Garden |  | 1696-1698 E. Main Street   |  | 0.09 |
| Community Garden |  | 156 Latta Avenue           |  | 0.1  |
| Community Garden |  | 1604 Kohr Place            |  | 0.1  |
| Community Garden |  | 573 Whittier Street        |  | 0.09 |
| Community Garden |  | 640 Gilbert Street         |  | 0.08 |
| Community Garden |  | 456-458 Garfield Avenue    |  | 0.11 |
| Community Garden |  | 1821-1823 Cleveland Avenue |  | 0.12 |
| Community Garden |  | 1827 Cleveland Avenue      |  | 0.11 |
| Community Garden |  | 2880 Bretton Woods Drive   |  | 0.16 |

|                    |                            |  |       |       |
|--------------------|----------------------------|--|-------|-------|
| Community Garden   |                            | 1680-1684 E. Main Street               |       | 0.1   |
| Community Garden   |                            | 802 St. Clair Avenue                   |       | 0.13  |
| Community Garden   |                            | 820 Kelton Avenue                      |       | 0.1   |
| Community Garden   |                            | 150-152 Clinton Street                 |       | 0.07  |
| Community Garden   |                            | 620 E. 3rd Avenue                      |       | 0.2   |
| Community Garden   |                            | Johnson Street                         |       | 0.07  |
| Community Garden   |                            | 241 E. Morrill Avenue                  |       | 0.09  |
| Community Garden   |                            | 267 Monroe Avenue                      |       | 0.05  |
| Community Garden   |                            | 265 N. Monroe Avenue                   |       | 0.05  |
| Community Garden   |                            | 272-276 Talmadge Street                |       | 0.05  |
| Community Garden   |                            | 456 Johnson Street                     |       | 0.11  |
| Community Garden   |                            | 257-259 N. Monroe Avenue               |       | 0.16  |
| Community Garden   |                            | 1589-1591 E. Rich Street               |       | 0.14  |
| Community Garden   |                            | 488 Reynolds Avenue                    |       | 0.08  |
| Community Garden   |                            | 285 N. Sylvan Avenue                   |       | 0.13  |
| Community Garden   |                            | 1380-1382 N. 5th Street                |       | 0.1   |
| Community Garden   |                            | 2923 Keystone Drive                    |       | 0.16  |
| Community Garden   |                            | 462 Johnson Street                     |       | 0.05  |
| Community Garden   |                            | Scott Street                           |       | 0.2   |
| Community Garden   |                            | 1034 Scott Street                      |       | 0.2   |
| Community Garden   | Crestview Community Garden | South East Corner of Weber and Calumet | 43202 | 0.38  |
| Community Garden ? | Karen's Kare               | 1832 Fariwood Ave                      |       | 0.02  |
| Community Gardens  |                            | 1185 E Broad St                        | 43205 | 0.005 |

|                             |  |                                     |       |         |
|-----------------------------|--|-------------------------------------|-------|---------|
| Community Gardens           | Courtyard Gardens                                      | 3724 A Olentangy River Rd           | 43214 | 0.02    |
| Community Gardens           | South Linwood Family Garden                            | 372 Linwood Ave                     | 43205 | 0.15    |
| Community Gardens           | The Gathering Green Comm Gardens                       | 924 E Main st                       | 43205 | 0.07    |
| Community Gardens           | North Linwood  | 148 Linwood Ave                     | 43205 | 0.11    |
| Community Gardens           | Avondale Gardens                                       | 290-294 Avondale Ave                | 43223 | 0.2     |
| Community Garden            | My Community Garden Two                                | 2224/2226 Cleveland Ave             | 43211 | 0.96    |
|                             |  |                                     |       | 72.9378 |
| Education                   | The Buckeye Ranch School Garden                        | The Buckeye Ranch                   |       | 0.005   |
| Education                   | The Ohio Governor's Residence and Heritage Garden      | 358 N Parkview Ave.                 | 43209 | 0.036   |
| Education                   |  | 6141 Clark St Rd                    | 43230 | 1.5     |
| Education                   | Outback Garden   | 900 Hague Ave                       | 43204 |         |
| Education                   | Small Childs Gardnen                                   | Corner front of building            |       | 0.004   |
| education                   | Grace Abound   | E Lakeview                          |       | 0.073   |
| Education                   | Lincoln Park Communitiy Garden                         | behind school 579 East Markison Ave | 43207 | 0.15    |
| Education                   |  | 333 W. Broad Street                 |       |         |
| Education and Demonstration | Domestic & International Fruit tree Adoption           | 3920 Wintercress Ct                 | 43207 | 0.75    |
| Education/School Garden     | Barrington Elementary                                  |                                     | 43221 | 0.01    |
| Education/School Garden     |  | Hilliard Community Center           |       | 0.015   |
| Education/School Garden     | WBA/ IRES Grow 2 Serve                                 | 62 West Bridge                      | 43017 | 0.017   |
| Education/School Garden     | Franklin County Early Childhood Learning Center (MRDD) | 4141 Rudy Road                      | 43214 | 0.04    |
| Education/School Garden     | Summer Experience Garden                               | 4300 Cherry Bottom Rd.              | 43081 | 0.09    |
| Education/School Garden     | Godman Guild   | 6th Avenue & 6th Street             | 43201 | 0.3     |
| Private                     | Kitchen Garden at Dragonfly                            | 247 King Avenue                     | 43201 | 0.005   |
| School/Education Garden     | MDS Salsa Garden & Butterfly/Bird Sanctuary            | 72 Woodlawn Ave                     | 43103 | 0.002   |
| School/Education Garden     | Childrens Garden                                       | 255 Rebb Ave                        |       | 0.004   |
|                             |  |                                     |       | 3.001   |
| Urban Farm                  |  | 285 Canyon Dr.                      |       | 0.1     |
| Urban Farm                  |  | 2624 Woodland Ave.                  |       | 5       |
| Urban Farm                  |  | Woodsede and Columbus-Wooster Rd.   |       | 0.5     |
| Urban Farm                  |  | Medina ave.                         |       |         |
| Urban Farm                  |  | 3555 Watkins Rd.                    |       | 7       |
| Urban Farm                  |  | 4670 N High st., Farm is in North   |       | 1.72    |

|                     |                  |                             |  |     |
|---------------------|------------------|-----------------------------|--|-----|
|                     |                  | Linden                      |  |     |
| Urban Farm          |                  | Not sure                    |  |     |
| Urban Farm          |                  | East of Clintonville        |  | 2   |
| Urban Farm          | Clarfield Farm   | 3220 Groveport Rd.          |  | 6.5 |
| Urban Research Farm | Waterman Farm    | Kenny and Lane              |  | 261 |
|                     | 4th Street Farms | weinland park on 4th<br>TBD |  |     |

283.82  
366.7618

## Appendix B

### CLEVELAND'S ZONING FOR URBAN AGRICULTURE & GREEN SPACE

#### Open Space & Recreation Zoning District (Ch. 342 adopted in 2005)

- gives the City the ability to reserve land for parks, recreation facilities and open space
- permits parks, playgrounds, swimming pools, recreation centers, marinas, cemeteries, green space
- establishes setback regulations for recreation facilities from Residential District line

#### Urban Garden Zoning District (Ch. 336 adopted in 2007)

- gives the City the ability to reserve land for garden use through zoning
- permits urban gardens and prohibits all other use of a property
- requires public notice and a public hearing to change the zoning to permit building on an urban garden site
- permits “market gardens,” including the sale of produce from farmers’ markets

#### “Chicken and Bee” Zoning (Ch. 205.04 & 347.02 adopted in 2009)

- allows most residents to keep up to 6 chickens, ducks or rabbits (1 per 800 sq ft) and 2 beehives in a backyard or on small vacant lots
- requires greater setbacks and larger land areas for keeping of larger animals (pigs, goats, sheep)
- allows coops and cages in Residential back yards to be set located within 5 feet of side lot lines and 16 feet of rear yard lines
- requires licensing by the City’s Public Health Department
- applicable citywide

#### Agriculture in Residential Districts (Ch. 337.02, 337.23, 337.25 adopted in 2010)

- permits agriculture as a principal use on all vacant residentially zoned lots
- permits sale of produce from farm stands in Residential Districts as conditional use with BZA approval, in consideration of established factors
- permits 4-foot high vinyl-coated chain link fences in front yards of urban agriculture uses, whereas chain link fences are otherwise prohibited in front yards in Residential Districts

#### Urban Agriculture Overlay District (Ch 336A pending for adoption in 2010)

- allows the City to designate particular areas for larger-scale farming activities
- permits greater intensity of animal raising and permits larger animals (horses, cows, alpaca, etc.)
- limits this larger-scale farming to areas specifically designated through ordinances adopted by City Council through a rezoning process

## Appendix C

### Interview Responses:

#### Megan Ogle, Franklinton Gardens

**1. How much land devoted to Urban Ag. are you currently involved with?**

*Approximately 1.5 acres total, split into previously vacant lots scattered throughout the community.*

**2. Do you notice any trends recently in the urban agriculture field of Columbus?**

*Yes, it seems that there are 2 versions of urban farming – the first is typically a charitable focus, with community garden plots or faith organizations growing produce for soup kitchens or other food donation avenues. The other is young individuals interested in healthy food-based entrepreneurship, starting local food businesses starting on a very small scale. Our organization encompasses both of these trends in its mission.*

**3. Based on your experience what are the top barriers or challenges your farm/garden has experienced in its infancy and current state? (Focus on 3-5 barriers)**

*Our largest barriers are the residential zoning and city code enforcement rules not being designed for agriculture; volunteer labor coming in with too variable skillset or consistency; finding financial support as we work to establish our official 501c3 non-profit tax status; and realizing how difficult it is to successfully sell food at a price that covers the cost of growing it.*

**4. What factors need to be improved upon in order to encourage more urban agriculture?**

*While Columbus Code Enforcement/zoning laws are more favorable in Columbus to urban agriculture than some cities, they are still not nearly as favorable to agriculture initiatives as the lack of ruling in rural agricultural areas. Some cities like Cleveland have created a re-zoning opportunity specifically to urban agriculture which includes many more exemptions than we have. That would be one option.*

*Otherwise, more support from consumers is likely what would make urban agriculture more successful. Currently the price of farmland is so high that it already encourages small-scale, urban endeavors.*

**5. Are there any major policy or zoning issues you have encountered?**

*Yes. We have a lot of trouble with the codes regarding weed management and bulk storage. Also, we previously worked with livestock (chickens) but the city code strictly forbids the sale of any animal product produced in the city. You can eat your own eggs but you can't sell them, so as a result, we don't have as diversified farm.*

**6. Do you have any experience with any other cities urban agriculture efforts? If so, which ones?**

*Yes, I have experience in Cleveland and a little bit in Cincinnati. I have contacts in Cleveland, Youngstown, Toledo, Dayton, Cincinnati, and Athens of folks involved in urban gardening or farming initiatives.*

**7. Have you heard of food forests/parks, do you think people of Columbus would take advantage of them?**

*Yes, I have earned 3 permaculture design certificates and have designed many food forest layouts. Most of the people involved with the Franklinton Gardens are at least somewhat informed in perennial polyculture designs. I do not have great faith in the general public to take advantage of much of anything, but I think that there are enough "permies" in Columbus that if these food forests were publically mapped, they would take advantage of that food.*

**8. Would a centralized online database with up-to-date information on other local gardens/farms be of use to you?**

*We're pretty short staffed and tight-budgeted. We are connected with some other gardens on facebook and notice their updates when we aren't too bogged down with our own priorities. If this database was about sharing excess materials and volunteer labor, perhaps that would be useful.*

## **Jorgenson Farm Email Response to Interview Questions**

### **3. Based on your experience what are the top barriers or challenges your farm/garden has experienced in its infancy and current state? (Focus on 3-5 barriers)**

*In the beginning of the farm, we had difficulty finding what was actually worth doing on the farm. What herbs/vegetables to grow, what livestock should we raise? How to market the product? It took some experience for those questions to disappear.*

### **5. Are there any major policy or zoning issues you have encountered?**

*We are in an agricultural zone, so no zoning issues.*

### **7. Have you heard of food forests/parks, do you think people of Columbus would take advantage of them?**

*I certainly support those particular sort of initiatives. It allows people easy access to food that is alive, which has the potential to be a tremendous experience. Maybe it will inspire some to start growing at least a small portion of their daily diet. That would be incredible.*

### **8. Would a centralized online database with up-to-date information on other local gardens/farms be of use to you?**

*It's funny you mention that actually. I think a database with local farmers, but also with local chefs and restaurants, would be very beneficial to both groups. It's really tough to have a consistent relationship because the farmer never knows how a particular crop might do in a certain season, and the chef doesn't necessarily know what sort of meals are going to sell best in a given night, weekend, month etc. However, I think having an online, largely decentralized organization would be a improved way to know what the chefs can cook and what the growers can grow.*