



Farming Concrete 2012 Harvest Report



2012 Results

Numbers at a glance:

106 gardens participated*
75 gardeners weighed
195 different crop varieties recorded
7,774.44 pounds of food reported
52,209 plants counted
48,385 of these plants have yield data**

Estimated total yields for participating gardens: 87,000 lbs***

Estimated total dollar value: \$330,000***

Total Reported Area Under Production: 4.5 acres

Top Ten Varieties By Number of Plants

Tomatoes
Bush Beans
Lettuce
Sweet peppers
Kale
Callaloo
Cherry Tomatoes
Hot Peppers
Swiss Chard
Eggplant

Top Ten Varieties By Weight

Tomatoes
Callaloo
Summer Squash
Cucumbers
Eggplant
Bush Beans
Sweet Peppers
Collard Greens
Cherry Tomatoes
Winter Squash

* Not all gardens participating in 2012 were community gardens, there were also school gardens and a small handful of backyard gardeners.

** Some varieties were recorded in the Crop Count by square foot coverage instead of by number of plants, and we do not have sufficient data on how many plants per square foot per crop NYC gardeners plant on average, so most of the data recorded by square foot coverage is not included in the final yield estimate.

***Estimates based on crops weighed by gardeners. Not all crops were weighed, and not all yields were necessarily recorded. As such, this is a very conservative estimate.

2012 Results

2012 marked the third and last year of Farming Concrete, a grassroots science project measuring food production in NYC community gardens and school gardens. New York City has over 500 community gardens and 300 school gardens, many of which grow food. In 2010, we set out to learn just how much food these gardens are growing in our city. With a team of gardeners, garden advocates, and researchers, Farming Concrete worked with hundreds of community gardeners as they recorded their yields.

Many of these gardeners were already keeping track of their garden's production. Our group simply provided the scales and support for

gathering a consistent and robust dataset. By democratizing the data and research processes, Farming Concrete hopes to achieve greater access to and sovereignty over information. The data we collect is returned back to the participating gardeners in the form of a report that they can use for advocacy, building membership, and raising funds. We also release the data publicly (albeit anonymized) in map form at harvest.farmingconcrete.org and soon in raw form. Added together, these numbers give us a novel way to look at the urban agricultural activities taking place in New York City's community gardens. This data can also be used to promote the preservation of existing gardens and the growth of new ones.



Methodology

In the spring of 2012, Farming Concrete hired and trained a team of community gardeners from all five boroughs to train new gardeners in their neighborhood in our record-keeping methods. With methods adapted from a University of Pennsylvania study called Philadelphia Harvest, gardens participated in one or both of two parts. The first was called Harvest Count, for which gardeners received a free scale and harvest log to weigh their harvests by

crop. The second type of participation, called Crop Count, was an inventory of the number of plants growing, per crop, for an entire garden. The average pounds per plant recorded by gardeners in Harvest Count was applied to the number of plants recorded in the Crop Count to arrive at the estimated overall garden yield. This yield was then monetized using prices from Whole Foods and NYC urban farms to account for premiums often placed on local and organic produce.

Results

In 2012, over 100 gardens participated, contributing more data to the project than the previous two years. We were not able to include everything that was recorded for a few reasons: 1) our overall yield estimate only includes crops that gardeners weighed in Harvest Count, and fewer varieties were weighed than were included in the Crop Count; and 2) some varieties were recorded in the Crop Count by square foot coverage instead of by number of plants, and we do not have sufficient data on how many plants per square foot per crop NYC gardeners plant on average, so data recorded by square

2012 Results

foot coverage is not included in the final yield estimate. As such, our yield estimates (and the associated monetary value) are very conservative.

Furthermore, the wealth of varieties of each crop grown by gardeners is not reflected in our reporting. For example, we counted basil harvests, but gardeners recorded varieties of basil such as lemon, purple, Thai, Tulsi, and anise . These varieties were combined under “basil” because the yields are similar, and we would have needed a larger sample size of gardeners growing each type of basil to measure yields for each individual variety.

Conclusion

This project would not have been possible without the participation of the many gardeners who counted, weighed, and recorded their harvests with us. One of our main goals with this project was to pilot a way for community gardeners to collect and use their own data. While this project focused on measuring food production, similar strategies could be used to quantify food scraps going into the compost pile, rainwater diverted from the sewer system, or the number of people interacting with the garden. We see Farming Concrete as a jumping-off point for answering these types of inquiries in a way that is respectful to the people who are asking and answering these questions. In the tradition of all open source projects, our hope is that communities will be able to build upon what we’ve created--both software and methodology--to achieve their own goals.

Through gathering this data, we confirmed something that we already knew - New York City community gardeners are growing a lot of food. Research shows that food grown in community gardens contributes to the food security

of those who grow it, as well as to the lucky neighbors, friends, family, and passers by who receive it. This food has a much lower environmental and climate footprint than conventional food, since it does not travel far before consumption and typically does not involve heavy chemical inputs. This food is also only one component of a community garden, which can provide a community with public health benefits, environmental education, lower crime rates, decreased urban heat island effect, mitigated stormwater runoff benefits, and myriad other benefits. A garden also acts as public space for events, recreation, community gathering, meetings, civic engagement, and numerous other uses. These precious gardens are often found in neighborhoods with limited green space and publicly accessible outdoor areas.

The more we learn about our gardens, the better equipped we are to advocate for their preservation and growth. More and more, cities use data for decision-making, and it’s important for communities to have access to--and the power to gather--the data they need to advocate for themselves. As gardeners who understand the critical importance of community gardens in our city, we hope Farming Concrete’s research and data will be used to illustrate the valuable role that gardens play in our food system and in our communities.

Thank you!

We are enormously grateful to all of the participating gardeners and crop counters for their dedication. We also thank our partners and advocates for their support.

