

FARMING IN THE CITY: A Crop of Urban Gardening Projects

case study | food and agriculture unit

EARTH matters

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During World War II, Americans were urged to plant Victory Gardens in their yards, window boxes, and public parks to supplement local food supplies. Gardens allowed families to stretch their weekly food rations and freed up railways and highways to move soldiers and wartime supplies. Surplus summertime produce was canned for the winter. By 1944, an estimated 40 percent of U.S. vegetables came from these small plots.¹

In the decades following the war, home gardening returned to more of a hobby than a necessity for most families. But as interest in local and sustainable food production and seasonal eating spreads, growing food close to home is making a comeback. With more Americans living in urban areas than ever before (over 80 percent of the population, according to the U.S. Census Bureau), growers are again becoming creative about where they produce food. Here are some innovative places you can find food growing in the city:

Vacant lots to urban oases

In the 1990s, an organization called The Food Project came to Boston's Roxbury neighborhood and transformed an abandoned lot from an eyesore full of abandoned cars, appliances, trash, and construction debris into an urban oasis. Tons of compost and many helping hands allowed the garden to flourish and provide nutritious food in what otherwise was a healthy food "desert" lacking walkable grocery stores.

Greg Watson, former executive director of the Dudley Street Neighborhood Initiative in the community noted that "urban agriculture will make a significant contribution to our local, village-scale economy...By focusing on abandoned lots and brownfields, gardens, farms, and greenhouses will play a key role in transforming current liabilities into community assets."²

This was just the beginning. Now farming 70 acres in Boston and surrounding communities, The Food Project grows over 200,000 pounds of chemical pesticide-free food each year and donates over 180,000 servings of produce to people in need annually.³



Photo Credit: Higher Ground Farm, Boston Medical Center

Higher Ground Farms grows fresh produce on the roof of the Boston Medical Center for the hospital's patients, staff, and their on-site foodbank.

Other U.S. cities encouraging farming on vacant lots include Chicago, Cleveland, San Francisco, and Washington, DC Some city governments are making lot ownership data more accessible to aid the transformation. Websites and smartphone apps put this information into the public's hands with sites like groundedinphilly.org, which has transformed over 140 vacant lots into community gardens throughout Philadelphia – an impressive start but still a small share of the 40,000-plus lots with no known use.⁴

Food as medicine

Back in Massachusetts, the Food Project also puts inner city youth to work farming the roof of the Boston Medical Center. There, a 6,000 square foot operation grows beans, peppers, tomatoes, and other healthy produce for the Preventive Food Pantry – a place where patients can go with a special doctor’s prescription for healthy foods. A registered dietician runs classes on how to prepare the foods at home. The idea is to prevent and treat conditions like diabetes, hypertension, and obesity not just through pills and medical procedures, but through a holistic healthy lifestyle.

Such principles were at play in New York City’s Lenox Hill Hospital, which in 2012 cut the bolts on its rooftop door to open access to a newly created rooftop garden. Hospital staff can enjoy the vegetables and herbs, and also a quiet place to recharge. The creator, integrative medicine physician Dr. Robert Graham, named the project Victory Greens in homage to the World War II effort, noting that “we’re also at war now – with obesity. Our first weapons in this war are learning to farm, to cook and to eat better.”⁵

St. Joseph’s Hospital, in Ann Arbor, Michigan, donates food from its campus farm to local food banks. Its hospital lawn was turned into a farm in 2010, and now boasts features like a protected hoop house with aisles large enough for wheelchairs to pass through and irrigation pumps powered by willing patients riding stationary exercise bicycles.⁶

At St. Luke’s Hospital in Bethlehem, Pennsylvania, patients, visitors, and hospital staff all can enjoy a selection of farm-fresh salad greens, tomatoes, broccoli, garlic, cabbage, beets, potatoes, herbs, among other foods from the on-campus organic farm in the hospital’s cafeterias or carry some home from weekly farmer’s markets.⁷ New parents are gifted a collection of healthy recipes atop a basket of fresh fruits and vegetables to bring home with their newborns.⁸

In the schoolyard

When those babies get older, they may be digging in a schoolyard garden instead of a sandbox. And that’s good news for health, since research shows that getting children involved in the growing, harvesting, and preparing foods can double their intake of vegetables.⁹ It may also help them learn better too.

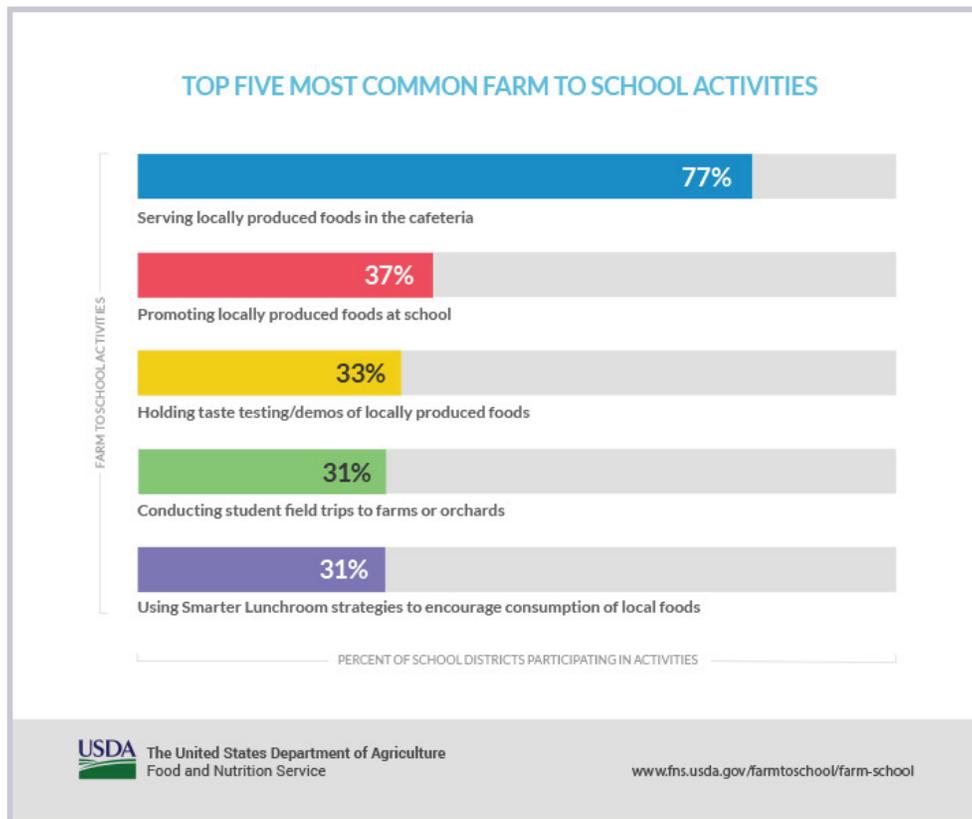
At Berkeley, California’s Martin Luther King, Jr., Middle School, science test scores have improved since students began learning integrated lessons in the one-acre organic garden and kitchen classroom. Called the Edible Schoolyard, the project was spearheaded by Alice Waters, chef of the popular luxury restaurant Chez Panisse that celebrates local flavors. Getting the garden going involved breaking up asphalt, clearing trees and brush, and creating beds for a wide variety of vegetables, not to mention making space for an orchard, two 3,500-gallon cisterns to collect rainwater, and coops for chickens and ducks that produce 500 eggs a year for the school. This model program has rooted spinoffs in 53 states and territories, and 75 countries around the world.¹⁰



Urban famers from Ready-to-Grow Gardens helping at a School Garden in South Florida.

Across the country, there are more than 12,000 school gardens according to the U.S. Department of Agriculture’s Farm to School Census. Beyond what the students help grow on their campuses, the Farm to School Census found that school purchases of local food is increasing quickly, rising from \$386 million in the 2011-2012 school year to \$1.26 billion in 2018-2019.¹¹

In Denver Public Schools, student gardeners sell produce back to their cafeterias, which now prepare food on site instead of bringing in premade lunches. At Colorado Springs’ Galileo School of Math and Science, over 100 raised beds yield some 5,000 pounds of vegetables.¹² In northern Vermont when the ground is frozen in winter, students grow herbs for the cafeteria on indoor towers.



At the ballpark

Sports fans are getting green exposure as well. Fenway Farms is not the home of a team-in-training for the Boston Red Sox, but the nickname for the 5,000 square feet of Fenway Park, America’s oldest baseball stadium, that in 2015 was turned into an edible garden. An automatic **irrigation** system senses the moisture conditions to provide water on demand. The garden is touted for its environmental benefits, such as its ability to reduce water runoff, improve local air quality, and insulate the building below, saving on heating and cooling costs. At least five major league baseball team stadiums have urban farms.¹³

While their total food production, which is often used for stadium concessions, is relatively small, the ballpark plots are an important teaching tool. For instance, the Garden at AT&T Park, home to the San Francisco Giants, hosts a children’s program and regular educational tours.¹⁴

Atop the grocery

Green City Growers, the team that maintains Fenway Farms in Boston, also takes care of New England's largest rooftop garden: a 17,000 square foot farm on top of a Whole Foods Market in Lynnfield, Massachusetts. At 25 feet from farm to sale, the installation makes for an incredibly short supply chain.¹⁵ The country's first rooftop farm integrated with a grocery store was built in 2013 at another Whole Foods Market, this one in Brooklyn, New York. The project's massive commercial greenhouses supply food to the store below even in wintertime.¹⁶

With close to a tenth of the U.S. energy budget devoted to moving food from the farm to the plate, producing food nearer to where people live reaps large savings.¹⁷



Fenway Farms: Green City Growers in Boston farms a 5,000 square-foot rooftop within Fenway Park.

A food revolution

As Pamela Hess, a former war correspondent now serving as Executive Director of Arcadia Center for Sustainable Food and Agriculture in greater Washington, D.C., notes: \$190 billion is spent each year in the United States to address chronic diseases caused by poor diets. In just one year, 73,000 people lost limbs from diabetes, more than 14 times the number of amputees from the Iraq war. Addressing this concern means getting healthy food onto more plates, from toddlers to seniors. Urban gardening is a way to help make this possible.¹⁸

In short, growing food in the city is not just a way for a niche audience to produce an amazing tasting heirloom tomato. It is a way to clean up neighborhoods, make use of barren rooftop capacity, educate children, and feed many mouths more nutritiously and deliciously.

Author: Janet Larsen (2016); Updated by Pam Wasserman (2021).

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¹¹ USDA Farm to School Census. (n.d.) U.S. Department of Agriculture. Retrieved August 5, 2021 from <https://farmtoschoolcensus.fns.usda.gov/>

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