

## Managing Risks on a Commercial Urban Farm

By Andy Pressman, NCAT Agriculture Specialist

From vacant lots to rooftops, urban farms are cultivating access to local food in cities throughout the United States. According to the United Nations Development Programme, an estimated 15 to 20 percent of food worldwide is raised in urban environments (Pearson et al., 2010).

While a majority of urban agriculture is taking place in cities throughout developing countries, urban farming in the United States is finding new roots in agriculture that supports access to local food and the strengthening of communities.

The interest in tending crops and livestock within and around cities is also exposing the need for change within federal, state, and local policies in support of urban agriculture. Cities across the country, such as Seattle, Kansas City, and New York City, are focusing on implementing policies to embrace the changing land-

scape and to encourage an understanding of where one's food comes from.

Defining urban agriculture can be as challenging as trying to make a living at it. Urban farms represent backyard gardens and urban homesteads, community gardens and orchards, vocational training organizations, commercial farms, as well as many others. They share the values for producing fresh and healthy food, whether it is grown in a raised bed, in an aquaponics system, or in a greenhouse on the roof of a building.

Although urban farming is being offered as a solution to food security for underserved communities, a majority of urban farms are having difficulties in achieving commercial success.

As new urban farms break ground, urban farmers are learning new ways to take

advantage of urban environments as well as managing risks less common to rural production. This includes an understanding of how to farm in areas that tend to favor warmer climatic environments, closer access to a diverse range of markets, and the use of equipment better geared towards urban land bases.

Crops, in particular, harvest great opportunities for urban farming success as farmers concentrate on intensive methods for managing production and increasing profits. Building a rich soil, incorporating close-space plantings, focusing on successional plantings, and using season extension techniques are four components for maximizing space and increasing yields.

Managing risks on an urban farm involves a strong effort in finding ways to overcome potential challenges. Local zoning restrictions, a lack of infrastructure, land tenure, and contaminated environments are just a few obstacles that inhibit the growth of an urban farm.

City soils are known to possibly contain contaminants, especially heavy metals, and require a close evaluation and frequent monitoring. Understanding the past use of a soil as well as having the soil tested for contaminants (and nutrient levels) is the first priority for any urban farmer. The results will help determine any necessary steps for remediation and will help protect the plants, animals, customers, and farmers from risks associated with food grown in contaminated soils.

Marketing risks for urban farms primarily

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Brooklyn Grange Rooftop Farm. Photo: Brooklyn Grange Farm

# Small-Scale Farms Take Ag Back to the Future

Where is the nearest farm to you? Is it hundreds of miles away, or do you pass it on the highway half an hour outside of town? Is it in a field on the outskirts of the suburbs? On an empty city block? In your neighbor's backyard? One of the biggest myths about farming is that it only takes place in rural settings, on large plots of land, and with just a few crops in cultivation. Small-scale intensive farming doesn't require large acreage, allows for the cultivation of multiple crops and livestock, and can take place right in your community. And it is, with increasing frequency.

Across the nation, communities are embracing urban agriculture, passing legislation, and creating programs that encourage local food production. The concept of farming is changing, moving back to communities, back into cities and towns across America. Small-scale agriculture, the kind that fits in your backyard, the vacant lots in your neighborhood, and the fields on the outskirts of town, can bring local food back to our communities. This means fresh, vine-ripened tomatoes, sweet carrots, and maybe even broccoli and spinach you actually love. It means helping your neighbors help you. It means farm products that taste good and are good for you, good for the local economy, and good for the local environment.

Projects such as NCAT's Small-Scale Intensive Farm Training (SIFT) program are helping shift the concept of farming away from something foreign that only happens in distant fields with center pivots along the highway, to something that you play a part in and that happens in your community.

Even with just a small plot of land, you can help shrink the distance and bring the community focus of agriculture back to life. And there are compelling reasons to do so. The average distance that food travels from farm to consumer in the United States is 1,500 miles, and much of that value is lost in supporting the type of agriculture that ships its products across these distances. Large-scale agricultural production, the

kind that takes place far from the closest community and sells to companies even farther away, can lead to problems with soil infertility, water shortages, water pollution, and food-security issues.

Rural communities are often crippled by food insecurity, even while they are surrounded by farmland, because the crops being grown in those fields aren't being grown for their lunch bags or dinner tables.

But there's more—flavor and nutrition are sacrificed when produce is bred for withstanding long-distance travel and is harvested before ripening so that it makes the trip in one piece. Nutrition is often processed out of the products you find wrapped in plastic or sealed in aluminum on the grocery store shelves. And we will likely never meet the people who profit from this long-distance food system. When we spend a dollar in our local grocery stores on food produced

on the other side of the country, or even the other side of world, that's a dollar that a local farmer didn't get—a dollar that that local farmer didn't spend in the café where you make coffee, or in the shoe store your parents own, or on the kids' guitar lessons that your brother teaches.

But no matter how elegant the system or how accomplished the farmer, no agriculture is sustainable if it's not also profitable, able to provide a healthy family income and a good quality of life. Sustainable practices lend themselves to smaller, family-scale farms. These farms, in turn, tend to find their best niches in local markets, within local food systems, often selling directly to consumers. As alternatives to industrial agriculture evolve, so must their markets and the farmers who serve them. Creating and serving new markets remains one of the key challenges for sustainable agriculture.



Urban farmer in New Orleans. Photo: Andy Pressman, NCAT

# NCAT Offering Urban Garden Workshops at U.S. Botanic Garden

The National Center for Appropriate Technology (NCAT) is pleased to be collaborating with the United States Botanic Garden in Washington, DC, to showcase urban farming in the United States.

NCAT is working with horticulture staff at the U.S. Botanic Garden to design raised beds using crop varieties and planting techniques common amongst urban farms. NCAT agriculture specialists will also be presenting the following workshops in 2014 at the U.S. Botanic Garden as part of the Botanic Garden's theme on urban agriculture:

## City Farming: Managing Risks & Increasing Profits

June 8 (2pm-4pm) and June 9 (6:30pm-8:30pm)

Presenter: Andy Pressman

## Understanding and Managing Urban Soils for Healthy Food Production

July 26 (10:30am-12:30pm) and July 27 (2pm-4pm)

Presenter: Chris Lent

## Fruits and Berries from City Lots

August 9 (10:30am-12:30pm) and August 10 (2pm-4pm)

Presenter: Guy Ames

## Managing the 4 P's: Pollinators, Parasites, Predators & Pests

September 6 (2pm-4pm) and September 7 (2pm-4pm)

Presenter: Rex Dufour

## Urban Agriculture: Sowing Seeds, Sowing Money

September 13 (10:30am-12:30pm) and September 14 (2pm-4pm)

Presenter: Dr. Carolyn Dimitri (NYU)

For more information, visit the U.S. Botanic Garden website at [www.usbg.gov](http://www.usbg.gov).

## Handbook Helps with Urban Farm Planning

As with all types of businesses, an urban farm requires planning. And if the farm is located in a repurposed building or on an abandoned lot, it could present even more challenges than a traditional farm. To help guide you through the process of planning, the Partnership for Sustainable Communities, through EPA's Office of Brownfields and Land Revitalization, produced two useful resources—the *Urban Farm Business Plan Handbook*, and its complementary *Urban Farm Business Plan Worksheets*.

These resources are the result of a project that provided technical assistance to the Toledo Community Development Corporation (CDC) to turn a two-plus-acre former industrial site into an urban farm, but they are also useful for other communities undertaking such a project as well.

The handbook, along with its worksheets, is available for free download at [www.epa.gov/brownfields/urbanag/pdf/urban\\_farm\\_business\\_plan.pdf](http://www.epa.gov/brownfields/urbanag/pdf/urban_farm_business_plan.pdf).

## Managing Risks (continued from page 1)

focus on direct market sales. Direct marketing tends to offer a higher value for goods, especially for specialty greens and culinary herbs. These crops perform best in meeting the criteria listed above for intensive plantings and can generate great profits for urban markets. However, many high-value crops tend to be less nutritious than crops that have higher caloric values and who are often in greater demand. Wholesale markets generally require larger quantities of crops and at a lower price which may

limit an urban farms ability to access these markets in order to make a profit. New agriculture aggregation and distribution methods are helping urban farms gain access in to these bigger markets.

NCAT, in partnership with New York University and Penn State University, is focusing efforts to enhance the viability of commercial urban farms. The results from their USDA-AFRI funded national study of urban farms are being used to create

technical information guides and support for urban farmers through NCAT's ATTRA project. Join us on April 29 as we host a webinar titled *Urban Agriculture: Sowing Seeds, Sowing Money*.

### Reference:

Pearson, L.J, L. Pearson, and CJ Pearson. 2010. Sustainable urban agriculture: stocktake and opportunities. *International Journal of Agricultural Sustainability*, 8(1-2), 1-19.



## ATTRA Publications

*Here is a sampling of ATTRA publications and resources related to urban and community agriculture. Be sure to check out our new and updated publications, too!*

### Publications

- Bringing Local Food to Local Institutions IP242
- Community Gardening IP376
- Community Orchards IP446
- Community Supported Agriculture IP289
- Evaluating a Farming Enterprise IP041
- Farmers Markets: Marketing and Business Guide IP146
- Market Gardening: A Start-up Guide IP195
- Montana Farmers Market EBT Manual
- Scheduling Vegetable Plantings for Continuous Harvest IP323
- Start a Farm in the City IP350
- Sustainable Small-Scale Nursery Production IP104
- Sustainable Soil Management IP027

### Other ATTRA Resources

- Alternative Soil Testing Laboratories [https://attra.ncat.org/attra-pub/soil\\_testing/](https://attra.ncat.org/attra-pub/soil_testing/)
- Urban and Community Agriculture [https://attra.ncat.org/attra-pub/local\\_food/urban\\_ag.html](https://attra.ncat.org/attra-pub/local_food/urban_ag.html)

### New and Updated Publications

- Drought Resources and Programs IP466
- Putting a Hand on Them: How to Tell When Your Lamb is Finished IP468

See the full list of ATTRA publications at <https://attra.ncat.org/publication.html>.  
Call 800-346-9140 for a printed copy.  
Prices vary. Many resources are free.

## ATTRAnews

Carl Little, Project Manager  
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[www.attra.ncat.org](http://www.attra.ncat.org)

ATTRAnews is the newsletter of the National Sustainable Agriculture Information Service. The free newsletter is distributed throughout the United States to farmers, ranchers, Cooperative Extension agents, educators, and others interested in sustainable agriculture. ATTRA is funded through the USDA Rural Business-Cooperative Service and is a project of the National Center for Appropriate Technology (NCAT), a private, non-profit organization that since 1976 has helped people by championing small-scale, local, and sustainable solutions to reduce poverty, promote healthy communities, and protect natural resources.

