# Introduction

The city of the future is green and delicious.

It is also creative and busy and messy and fun and beautiful—although the last two points were lost on the residents of the Vancouver waterfront neighborhood where I recently tried to lead a public meeting.

I was there to explain a proposal for a community garden that was to be tended by neighbors from a world of backgrounds. It was part of a government-funded program to help immigrants and Canadian-born residents build a more welcoming society by growing organic food together.

I figured it would be an easy sell because it was about food and came with a feel-good bonus. At least 40 percent of the gardeners were to be foreign-born (matching the population of the downtown peninsula) and all were to attend workshops on racism, intercultural communication and inclusive group governance. Behind the proposal was the idea that Vancouver's visible success as a multicultural city wasn't telling the whole story. It can take years for newcomers to Canada to feel a sense of belonging. So bringing a diverse group of immigrant and Canadian-born residents together to speak the same language – vegetables – was an experiment in social harmony. It would help transform Vancouver from a mere *multi*cultural city, where you might wave to the Punjabi neighbors whose names you can never recall, to an *inter*cultural city, where you actually know who they are and maybe even care about them because they're your friends and you're going to see them at the next block potluck or community center canning workshop or neighborhood food network meeting.

But first we needed land.

We weren't asking for much: a narrow strip of grass in a public park behind two fenced tennis courts above a much larger lawn beside the sea. The strip had space for about twenty food plots and a few fruit trees and berry bushes. Nothing that would turn back the tide of the industrial food system, but enough to support a worthy program aimed at combining the new food politics with community engagement.

Except that this particular community must have misread the notice. They acted like we'd called for community enragement. Judging by the aggressive way they strode into the room, glaring, I sensed I was in for a long night. Canadian decency meant they at least waited in turn to lambast the proposal and anyone like me who would dare support it, but it like was a tar-and-feathering without the tar and feathers. Not that they couldn't have afforded them. Condos in the towers overlooking that stretch of the water sell for more than a million dollars.

First to speak was a fifty-ish woman in jogging shoes. "How dare you come into *our* neighborhood and suggest something like this?" she demanded. "Where do *you* live anyway?"

I was about to answer when a short man with a congenial grin interrupted. "I used to be a farmer so I know all about growing food," he began, briefly lifting my spirits. "When I heard about this community garden thing I took a drive around town, to see what they looked like." He turned to me and shrugged. "They're ugly. No offense." Then back to the crowd: "But they are."

"We have a wonderful park already," a woman in a fashion tracksuit announced. "But *this*? This would turn it into a *hellhole*."

And so it went, each speaker explaining how awful a community garden would be for that site while the rest nodded and harrumphed in support. I fixed a smile on my face and settled in for a rout. Then a brown-skinned man entered in a wheelchair. At last, I thought, the reinforcements are here, and none too soon. I was wondering how to mention the fact that raised planting boxes would make growing food accessible for everyone, when it came his turn to speak.

"Thees plan ees terri-ble," he said. An Iranian couple behind him nodded vigorously in agreement. I kept my frozen smile as the next woman to speak called out from the side.

"Why we would need an *intercultural* garden anyway?" she asked as if it were some kind of disease.

I gestured to the table in front of me where someone (me) had dropped an issue of that day's free metro daily. The cover story was about violent attacks on gays and ethnic minorities. The headline read, "Vancouver #2 Hate City."

But they weren't interested in news. "You can't just waltz into our neighborhood out of the blue with this kind of thing," someone declared. It was the woman with jogging shoes. "Don't you even know you need to do a public consultation?"

I swept an arm to indicate me, her and the rest of the crowd, then held up my palms: wasn't this a public consultation? Unfortunately the gesture didn't include the city official who had organized the event and sat with me at the start of the deluge, but then had to leave for a more important meeting.

"We put up posters months ago," I explained. "We held five information sessions for people to learn more about it, including one right here in this community center. We had two larger town meetings for anyone interested to come talk about it and say how they'd like it go. Residents told us they were interested in having a community garden, and this was one of the possible sites."

More scoffing, more accusations of a plot to ruin their lives. I wondered how long a man could keep a smile on his face before pulling a muscle. A young couple arrived pushing a stroller. Great, I thought, now I can learn how many ways a carrot might harm a child. But they turned out to be all for it. The father, in a quiet voice, said, "Nobody uses that strip of grass anyway, do they? We could use it to help kids learn where their food comes from. You know what I mean?" I did, but waited for someone else to say it. They turned instead to watch the entrance of a tall, tanned, white-haired man wearing a pinstriped suit worth more than my car. He explained, in lawyerlike fashion, why the proposal and the process itself were both flawed. When I didn't immediately agree, he explained it again. Then a third time. If I were on a jury, I thought, still smiling, I might rule against him just for being redundant, or maybe because of the suit.

The couple with the stroller slipped out, which was unfortunate because they would have had an ally in a short Asian woman who insisted on being heard even as others tried to interrupt. "I support this," she said looking from one blank face to another. "I think a community garden is a good idea." She had to raise her voice to get above the grumbling. "We *can* grow food in the city. Why not?



Can't we and crops all just get along?

More healthy! Why should we have to get all our food from far away? We can grow ourselves. It's good for you! Good for the community! Something to do together!"

"You'll never get away with it," the woman in jogging shoes interrupted, looking at me. "Do you *know* how much I pay in property taxes? Where *do* you live anyway?"

I can't say I was surprised later when city staff, citing neighborhood opposition, turned down the proposal. I didn't take it personally. You win some, you lose some. But the neighbors' reactions still bothered me.

Was the idea of a community growing food together really so outrageous?

Was the sight of crops in an urban setting really that offensive?

If a modest proposal for a small food garden in an unused stretch of a park could generate that much heat, what hope did we have in our increasingly crowded cities for urban agriculture?

I took a little comfort in believing this crowd was not representative of the city as a whole. Someone told me they had also come out against a plan for an elementary school because — who knew? — it might attract youth.

But I also realized they weren't alone. Anyone proposing a food-growing project in the city can expect at least some opposition. More than a few people have made up their minds on this one. Farms may be fine, for out there, in the farmland where they belong, but here in the city we've managed to leave the muck and slop and smells behind. City people shouldn't have to endure the sight of their food until it's ready for them in the supermarket.

How did we get to this? How did we go in just a few generations from agrarian people with ties to the land and a respect for those who tend it to urbanites disgusted at the thought of anything even resembling a farm in our backyards?

#### Local man lost

I don't have *the* answer. But I have a start on a few answers that could add up to an explanation.

We are no longer grounded.

We have lost touch with our food and how it cycles through our lives from seed to plate to waste and back around.

We have swallowed the myth that small farms are inefficient and only factory farms can feed a hungry world.

We don't know how to grow our own food.

On that last point, you may think — so what? I also don't know how to build a lightbulb or plumb a home, but the lights and water still work, and when they don't I can call in an expert to help.

But the analogy doesn't account for the fact our lives are made poorer by our ecological ignorance. If we can't recognize the forces of nature moving around and through us, we can't live fully realized lives as a part of that nature. An unfortunate by-product of this modern disconnect is how we no longer understand the implications of our food.

We know little about how it was grown or raised, how it got to our plates or what happens to its remains when we're done. They could be feeding us poison and most people wouldn't even know it—but they should. Because it's wrong to live in mute submission to institutions powerful enough to keep us alive or drive us to an early grave. Here the Big Food corporations can (and will) be blamed, but they're only doing what they're expected to do, make a profit. The fact that we blindly buy into this makes us complicit. That the results are tragic for more than two billion people, and perhaps for the future of the Earth, should have us all looking at our collective shoes in chagrin.

But don't, not just yet. Keep reading instead. This book is not a pity party. We aren't here to weep and wail and gnash our teeth. It's fair to articulate the sorry state we're in, even to get angry about it, but I don't believe it's worth dwelling on the bad stuff, because things don't get done that way. Change is created by people who care, are committed to a cause and engaged in making things better. Such as farmers. The ones we need to help build the city of the future. The group you are being invited to join.

#### City on a thrill

The city I'm talking about is one with its food up front and the people who grow it an important part of the cultural community, rather than sad media stories or cartoon displays in corporate ads. In this city we will know the people who grow our food because they will be us.

Imagine a place shimmering under the canopy of the urban forest, the standard shade trees replaced by city orchards ripe with fruit and nuts. Picture the building walls green and alive with vine crops and vegetables in vertical gardens. See the berry shrubs defining the paths and decorating the park spaces. Watch locals of all ages, colors and backgrounds working together on the land, sharing tools, stories and harvests. Once-empty lots are now production-level farms. Flat roofs have come alive with crops and beehives. Aquaculture tanks with edible green covers are attractive features in public displays. Abandoned warehouses and factories have been reconfigured into indoor growing facilities for vegetables, fish, mushrooms and more. Organic fruit, flowers, herbs and vegetables taken fresh from the soil and still surging with vitality are sold citywide at farm gates, kiosks and street stalls.

Still with me? Or too much too soon? I realize that some people, benumbed by our present urban blight, may have difficulty conjuring up this scene. But it, or some version of it, is coming. By choice now or by necessity later. We will soon be a planet of nine billion people, with six billion living in cities. If the world is going to feed itself, cities must be transformed.

The city of the future will be a living, dynamic, holistic and edible place. The sooner we start growing it, together, from the ground up, the better it will be for all.

When I wrote *Guerrilla Gardening: A Manualfesto* (New Society, 2007), I thought everyone should see the city as a garden. Now I want everyone to see it as a farm. That's the aim of this book. It is written for:

- Urbanites seeking edible autonomy.
- Beginners intimidated by things like seed planting depths and compost carbon-nitrogen ratios.
- Gardeners who want to add food crops to their plant palates.
- · Homeowners who would rather eat than mow their yards.
- Cubicle-bound dreamers who think tending the land may be more inspiring than working the copy machine.
- Entrepreneurs who count the number of urban consumers, the amount of unused urban land, and can do the math.
- Farmers who realize you can never learn enough about the amazing world of plants.

- Activists driving the new food politics on democratic, just and ecological grounds.
- Urban designers and planners using food and the ways it gets grown, processed, packaged, marketed, distributed, eaten and recycled to reshape our cities.
- Community developers tying health, environment, education, employment, transportation, waste recovery and more all together with urban agriculture.
- You, if you're none of the above but have still managed to read this far.

## Reading plan

Inside this book you will find ideas big and small, designs of various examples, practical tips and words of experience from people with a few seasons on the farm under their belts. More than anything, it is hoped, you will find inspiration.

If you start at the beginning—where you are now—and read in a straight line, you'll take the most logical path to the end. The



Cuba figured out how to turn city lots into organic farms.

size of the growing operation goes up in scale with each chapter, for a while. We start out with a few plants in pots on a sunny kitchen windowsill. Then we move to the space of a typical apartment balcony using containers. Then to a backyard vegetable patch. We know we're getting serious when we dig up the whole backyard. Then there's no turning back, because we're after the front yard too. From there we move beyond residences to open spaces such as school yards and roofs that might better be turned into cropland. After that we ask what happened to the commons as we explore community gardens. We then make a pitch for their neglected cousin, community orchards. Next comes the rise of production-level urban operations, before we end with a glimpse into the future of city farms to see whether we really will end up with cows in high-rises.

That description may make things sound straightforward, but you can expect digressions amid blocks of general information that aren't necessarily bound by any particular scale. So chickens go in Chapter 4 about backyards, no problem there, but Soil 101 could have been added almost anywhere (it's in Chapter 3 where we start on backyard patches), and aquaponics could mean anything from a few edible aquarium fish and plants for your desktop to something grown at marketable level, as we shall see, but I have slotted it into Chapter 2 on container farms. Readers who prefer a meandering approach can always check chapter titles in the table of contents to get their bearings.

Because this book is written for a wide range of growers, from novices to pros, and makes no claims to inventing a new science or technology of raising food, you will probably find some of the information familiar enough to skim or skip. The ideas and designs offered here represent a collection of shared wisdom from a variety of sources, including my own experiences. If a notion resonates with you, try it in your own city, or first modify it to make it better and then try it. I'm guessing that most growers, typically both curious and ever keen to sweeten their luck with nature, will at least be interested in the prospect of hearing how others are doing these things. If nothing else, old hands might look at the section on how to dig a hole: turns out many of you are doing it all wrong.

### The usual disclaimers

I feel bound to explain that although I've been lucky enough to earn my keep for the last five years in urban agriculture, I don't farm for a living. The fields I cultivate are in politics and the environment. I work through design, advocacy, community organizing and education. I don't grow crops for the market.

Most years, when I'm not too busy spouting to others, I grow food for myself and my family. I also help individuals and groups design, plant and manage food gardens, do consulting on urban greening issues including organic fruit tree growing, and work on municipal and regional policies to encourage more local agriculture. I've kept up with and even tried to encourage the trend toward scaling up into bigger spreads and larger yields because I'm convinced urban agriculture is necessary, and a growth industry. But as with many rural farmers these days, I don't have an easy answer to the hard question of how to make it pay.

I realize the threat to the family farm is not just a North American crisis. My involvement in local urban agriculture led me to a position on the board of directors of Heifer International, a nonprofit charity using the self-reliance model to help small farmers worldwide, including in North America. Situations are naturally different in each of the fifty countries where Heifer currently operates, but the strategies are based on a single idea: given the chance, communities will grow their own solutions to hunger, poverty and caring for the Earth.

That may sound simple enough to be true, but it is not a given. Most of our food now comes from places we don't know through a system run by corporations we don't recognize. We eat from a vast network run by Big Food—agribusinesses and chemical companies aided by financial speculators who hope to drive the small farmers of the world off their farms. Growing a monocrop over vast acres can be profitable, for a few, but not for the many (which is why the small farmer has to go) and not for the planet (we all pay the environmental costs for bills the big players never see). The crisis now facing the small farmer stems from being pitted in a rigged battle against factory-farm corporations backed by government support and subsidies.

What can be done? Plenty. Starting by going to the root of the matter, the way we grow our food. Every new urban farmer who enters the field is a soldier on our side, and every engaged urban consumer who buys consciously is an ally. If it seems like the odds are still stacked against us, maybe they are, for now. But hope is out there. Or rather, up there. The source of all life is still shining equally for all. No one can buy the Sun. Thanks to the miracle of our planet, the fact that plants eat sunshine, this earthly bounty is available to anyone. You still have to muster up the land (without necessarily owning it), as well as the gumption and some seeds



From soil to supper by way of a farmers' market.

and tools and things, but the magic is waiting for anyone determined to turn a seed into a meal and maybe even into a living.

This book is written with respect and gratitude for the urban agriculturalist. The city farmer. The town grower. The freethinking, hardworking visionary hero upon whom we will increasingly depend for our survival.

Long may you farm.