## Chapter 1 Gardening in the City

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A smore and more people move to cities from rural areas, they bring their love and knowledge of gardens with them. We're seeing a renaissance of urban gardening in cities around the world. City dwellers are realizing that they can't just rely on rural farms and transportation to supply them with food, fuel, and the energy they need. Cities need to be inhabitable, and having clean air and water are top priorities for maintaining the quality of life in cities. Not only does a cleaner environment and fresher food make for a more livable city, it makes for healthier residents with fewer medical issues.

In this chapter, we give you an overview of all the ways you can garden in the city. We cover the basics of growing healthy soil, the many places to have a city garden, the types of plants that grow well in urban environments, and ways to keep them healthy.

### Knowing the Basics of Soil Prep

Most people think of soil as nothing more than the dirt that's beneath their feet. They couldn't be more wrong. Soil is a living entity, and healthy soil is more than just the dirt you see in vacant lots or around construction sites. Plants need healthy soil to grow, and in the city, that becomes even more imperative. Cities stress plants with their heat, cold, wind, air and water pollution, vandalism, and soils lacking in nutrients. Healthy soils to the rescue! A healthy soil can keep your plants vibrant, and just like the human body, when plants are healthy they can better withstand all types of environmental stresses.

Here are some of the ways to nurture and build a healthy soil in the city. More details on soils are available in Chapter 4.

- ✓ The living soil. Soil is loaded with living organisms. These microbes help make nutrients, water, and minerals available to plants. Unhealthy soil is devoid of organic matter (the food of microbes), microbes, and any life-giving capacities. Your job as a gardener is to build up your soil so your plants will thrive. This can mean amending your existing soil with compost and other forms of organic matter or replacing your existing soil with something better.
- ✓ Start with organic matter: We wax poetic about the value and role organic matter plays in a healthy soil in Chapter 5. Street merchants don't peddle organic matter, but someday it may be considered that valuable. Right now though, many kinds of organic matter are available for free. Organic matter comes in many forms; hay, straw, untreated grass clippings, leaves, compost, manure, and pine needles. Knowing how to use it to feed your soil is important for a healthy garden.
- ✓ A soil checkup: Our bodies need a checkup every so often to make sure they are healthy, so why shouldn't your soil? It's important to figuratively take your soil's temperature by doing a soil test and other tests. Check the pH (measure of acidity and alkalinity). Check the water drainage to be sure your plants don't sit in wet soils too long. Wet soils can harm many types of plants. Analyze your soil for potential contaminants that may be in your patch of urban heaven. Knowing what you've got for soil helps you know what to do to improve it.
- Feed your soil. We all know that the foods we put in our bodies affect how we feel. Well, plants aren't any different. What you feed your trees, shrubs, and garden plants influences their health and growth rate. Knowing your plants and your soil helps you determine what fertilizers and amendments to add to make for healthier plants.

# Finding the Many Places to Garden the City

Most people think of gardens as beautiful places in pastoral settings. Even in botanical gardens that grace most cities around the globe, the greenery and gardens there create a sanctuary that is fenced in and often hidden from view.

But cities have many places to garden beyond the botanical garden. Many city residents have a yard where they can tuck in gardens. In some communities, rules may be in place restricting where on your property you can garden and what you can plant. But city residents in many areas are challenging the notion they can't grow food gardens in their own front yard. Pulling up the traditional lawn and planting tomatoes, zinnias, and apples is just one way urbanities are gardening in the city. Here are some other obvious and not so obvious ways they also are growing greenery amidst the concrete and steel. We talk more about the many places and ways to garden in Part III.

- Vacant lots. Many cities are taking vacant lots and transforming them into small parks, green oases, and community gardens. These "community" gardens often take on the flavor of the residents and become meeting places for the neighborhood. Often the garden is a harbinger of change in the neighborhood. Once a garden springs up in a vacant lot, trash and litter may be picked up, graffiti replaced with murals, and decorative art work installed in the neighborhood. All this creates an identity reflecting the various cultural and ethnic backgrounds of the residents in the neighborhood.
- ✓ Grow it in a pot. Container gardening has revolutionized the ways people can grow plants in small spaces. Container growing helps avoid many soil issues because you are using soil specifically adapted to pot growing. Plus, if you don't have the space or proper conditions in the ground where you live, it's pots to the rescue. Containers not only fit in unusual places, like fire escapes, but they are mobile and can be moved with the sun and season.
- ✓ Growing on the roof. Rooftop gardens can produce food for a hungry city, reduce the urban Heat Island Effect (we talk about that in Chapter 3), and reduce storm water runoff. If the roof won't work, try the walls. Green wall gardens are springing up in many cities that not only have many of the same benefits as green roofs, but also visually soften the look and feel of a city block. We talk about green walls in Chapter 10. Trellises, pergolas, fences, and arbors are all ways to make use of the vertical space gardeners may have in their otherwise space-limited yard. Growing vines upward is a way to maximize what you have growing in the city.
- ✓ Inside gardening. You're probably getting the idea we believe you can garden anywhere outdoors in the city, but some folks have only a balcony or patio or live many stories up. The solution for these land-deprived residents is apartment gardens. Using grow lights and maximizing the light through windows, you can grow houseplants that clean your air and edible plants to provide food. Windowsill herb gardens and salad gardens under lights are just some of the ways apartment dwellers can jump on the green bandwagon. We'll talk more about apartment gardening in Chapter 11.

#### Growing All Kinds of Plants in The City

Now that you're convinced you really have more gardening opportunities than you thought in the city, naturally the next question is, "What should I

grow?" Well, the simple answer is grow what you like. But that answer isn't enough for most city dwellers. There are soil, space, pollution, and other issues facing urban gardens. So it's important to grow the right plants for your area and, ideally, ones adapted to city culture. Take a look at some of the options.

#### Trees and shrubs

Trees and shrubs do more than dress up a yard. They provide shade, wildlife habitat, beauty, and potentially, food. It all starts with the right tree or shrub for your space. There may be utility lines above and below ground that workers need to access. The last thing you want is to buy and plant a tree and have it grow well for years, only to have the utility company come and cut it down when it begins to interfere with their lines. Planting a tree or shrub whose mature size is to big for the space available leads to drastic, harmful, and unattractive pruning.

You'll also need to find the right tree or shrub for the existing sun/shade conditions, climate, soil conditions, water availability, and wind conditions. It may sound daunting, but in Chapter 16, we highlight those trees and shrubs that can handle city life and keep performing for you.

If you're like many city dwellers, food gardening is becoming more of a priority, and growing berries and fruit trees fits perfectly with that vision. Dwarf varieties of fruit trees are well suited to small spaces, and self-pollinating fruit trees and berries allow you to enjoy a harvest from just one plant. Even a small city yard usually allows space for a delicious harvest of homegrown fruit!

#### Edibles

Speaking of edible gardening, vegetables and herbs also fit beautifully in city yards and containers. Whether in a community garden, front or back yard, or a large container, you can grow a whole host of vegetables in most cities. While the ultimate size of the plants isn't as big an issue with vegetables as it is with trees and shrubs (melons, winter squash ,and corn being the exceptions), it's still important to grow varieties adapted to your climate and space. Dwarf varieties of tomatoes and cucumbers, for example, make growing these popular veggies easier in containers.

The city has many potential problems the budding veggie gardener must deal with, but one thing is does help you with is the length of the growing season. Because cities tend to absorb heat during the day and radiate it out at night, the overall environment stays warmer than the surrounding countryside.

This means when your cousin upstate is getting frost, you may still have a few weeks of growing left. You can really push the envelope with devices that protect plants from frost such as cold frames and floating row covers.



If you really want to grow edibles easily, try growing perennial herbs. Some perennial herbs can actually be called weeds, they're that tough to kill. Try a container filled with mint, lovage, or chives as a good way to start your edible garden. Once you see how easy it is to grow these, get going with annual herbs such as basil, parsley, and cilantro.

#### Annual flowers

Annual flowers are perhaps the easiest city plants to grow. They are bred to bloom their heads off all season long. Many annuals are small plants that easily fit in containers and small spaces. There is such a range of plant types and flower colors that you can become the van Gogh of the neighborhood just by arranging your annual flower varieties in beds or pots.

Probably the most important part of annual flower gardening is choosing the right plant for your location. (Does this advice sound like a broken record yet?) Some annuals like full sun and heat, while others like part shade and cool temperatures. Many people redesign the interior of their home periodically, picking up seasonal themes. You can do the same in the annual flower garden, changing your annual flower garden by the season. For example, grow cool weather-loving annuals in spring and fall and heat lovers in summer.



The deadhead is dead. It used to be that deadheading annual flowers (clipping or pinching off the faded flowers) was the norm. Many new annual flower varieties drop their spent blossoms naturally and don't require deadheading. So all you have to do is keep the plants alive and they will thrive.

#### Perennial flowers and roses

If you like flowers but get tired of replanting each spring (after all, that's what annual flowers are, one and done), then go for perennial flowers. Most people think of perennial flowers in terms of broad borders filled with multicolored flowers of various colors and textures, like on an English country estate. Well, perennial flowers can be arranged like that, or they can also be used in many other ways in the garden.

Perennial flowers come back consistently each year, and some get larger and spread as well. While the flowers of some perennials, such as peonies and iris, may seem delicate, the plants themselves are long lived and tough as

nails. I've seen perennial flowers, such as daylilies and bee balm, surviving in pavement cracks and abandoned lots in the city. As with annuals, you'll have to chose between sun and shade lovers.



Some perennials can be invasive, taking over an area if you don't watch out. Bee balm, lily of the valley, ajuga, and English ivy are just some of the aggressive perennials that may be great in a contained area but can wreak havoc in a garden by running rampant over less aggressive plants.

Roses are pure delight. They fit beautifully in an urban garden because many rose varieties are small in stature but big in the size and number of flowers. Some are even small enough to fit in containers. Hybrid roses need more attention compared to species and landscape varieties. Climbers are perfect for arbors and walkways. In Chapter 15, we talk all about variety selection, fertilizing, and pruning these shrubs so they stay healthy in your yard.

#### Lawns and groundcovers

It's tiring having concrete, asphalt, and gravel beneath your feet. If for no other reason, lawns are good for the spirit just because they give us something soft and comfortable to step on.

Lawns soften the urban environment in other ways. Grass quiets a yard, reduces storm water runoff, and provides habitat for microbes and wildlife. Although we've been known to trash the American lawn as a wasteful land-scape feature, in the city, green is good. If lawns fit your landscape needs, then grow grass. Choose warm or cool season grass types, depending on where you live. Grow lawns in areas around your yard where you'll entertain, play games, or just hang out.

If your yard doesn't have enough sun for lawn grass, consider planting ground covers instead. Ones like vinca and sweet woodruff grow best in shady conditions — just what you find in many cities. The right groundcover grown on healthy soil will spread to fill areas under trees and around shrubs. They create the green lawn effect, except you can't walk on them very frequently. But even this idea is being tested by new ground covers that can be stepped on occasionally. We give you ideas on growing lawns and groundcovers in Chapter 17.

#### Exploring the Down and Dirty of Growing

Planting the right plant for your yard and needs is the first step to a successful garden. Keeping it healthy is the clincher. Watering, weeding, mulching,

and pest control are all important pieces of a healthy garden. That's why we devoted a whole section to growing plants. Here's what to expect.

#### Weeding and mulching

We're all about reducing the amount of labor and time spent working in the garden and increasing the amount of time we spend enjoying and eating from the garden. Reducing competition from weeds will lead to a healthy garden. Weeding early and often, reducing perennial weeds, and not letting weeds go to seed are all ways to reduce the weed pressure.

One of the other ways to reduce weed woes is to use mulch. Laying organic or inorganic materials such as black plastic, straw, or old leaves on the soil will stop weeds from germinating and growing in your garden. Plus, some mulch materials, such as the bark mulches, are decorative and beautiful to look at too. We talk all about weeding and mulching in Chapter 18.

#### Watering

Water is a precious resource and will only get more precious in time. That's why we devoted all of Chapter 19 to the most efficient and best ways to water your trees, shrubs, vegetables, flowers, and lawns.

The best ways to water are generally the most efficient. Drip irrigation and soaker hoses apply water right around the base of plants so little is wasted on pathways or to evaporation into the air. Watering in the morning helps roots absorb water better while it's cool and reduces the amount of disease on plant leaves since they can dry before evening. Collecting water from roofs after natural rainfalls and storing it for future use reduces the amount you need to buy from the water company or municipality.



Dry conditions in cities can kill plants as fast as any pest. That's why it's important to look for drought-tolerant trees, shrubs, flowers, herbs, and vegetables to grow if drought is common where you live. Check with your County Extension office or Master Gardener program for a list of drought-tolerant plants adapted to your area, then look for them at your local garden center.

#### Pest patrol

We couldn't talk about gardening without talking about insects, animal pests, and diseases. If you follow all the guidelines we mention in the chapters on soil building, plant selection, site preparation, and growing advice, you shouldn't have many pests to control. But even the best gardeners have to

deal occasionally with pests like rabbits, dogs, or caterpillars or contend with an outbreak of mildew on their garden plants. It just can't be avoided. That's why it's important to follow these steps for the safest and most effective pest controls:

- ✓ Identify. Make sure you know what's causing the problem. Sometimes it's weather, pollution, or even people that are affecting your plants, not animals, insects, or diseases.
- ✓ Decide. Once you know what the cause of the problem is, then you'll need to decide if it's worth controlling. Sometimes it's late in the season and you're ready to wrap up the growing season anyway. Other times a plant may have finished producing and can be pulled up to be replanted with something else. Some plants, such as potatoes, can take lots of leaf damage and still produce a good crop.
- Prevent. If you know it's likely that certain animals, insects, or diseases may attack your garden, then it's often a good idea to plan ahead for them. Using preventive measures such as growing resistant varieties, creating fences or barriers, and planting when the pests are less likely to attack are ways to reduce any need to control pests.
- ✓ Trap. Before reaching for the sprayer, consider traps as a control strategy. Insect and animal traps can remove enough of the pests to reduce the pressure on plants and save your harvest. They may not control all your pests but will bring the population down to acceptable levels.
- ✓ Organic sprays. As a last resort, use targeted organic sprays, such as *Bacillus thuringiensis* (Bt), to control the pests. Sometimes a few well-timed applications of a spray is all you need for the season.

Go to Chapter 20 for more details on specific plant pests.