



# VERTICAL gardening



**a complete guide to growing  
food, herbs, and flowers in small spaces**

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**I grow plants for many reasons:  
to please my eye or to please my soul,  
to challenge the elements  
or to challenge my patience,  
for novelty or for nostalgia,**



**but mostly for the joy  
in seeing them grow.**

DAVID HOBSON





## CHAPTER



**A** vertical garden utilizes supports (such as fences, trellises, or walls) either to train plants to grow upright or to hold containers of plants above the ground. Increasingly, people see vertical gardening as a way to grow their own food in a limited space or to enjoy the benefits that plants bring to an indoor environment. Perhaps they live in a city apartment or in a townhouse with little to no outdoor room for a garden, or they have a small garden space that cannot be expanded. Some people want to save money by growing their own produce or look forward to the health benefits that come from eating fresh food and being active outdoors. There is also growing concern about how our environment is impacted by the amount of fossil fuels needed to transport food from farm to table.

Growing vertically is the answer to all these concerns, and I consider it to be one of the most exciting developments in horticulture. The world is struggling to support a growing population, and vertical gardening could provide a much-needed solution for boosting productivity without

increasing tillable acreage. Better productivity would discourage deforestation, a serious problem in developing countries that are struggling to produce enough food for consumption and export.

Many people refer to vertical gardening as urban gardening because it's popular in cities and towns where growing space is at a premium. Anyone who has a balcony or a small yard can turn it into a productive vegetable garden by growing plants in pots. However, even if you do have space for a garden, you might want to grow more produce than you have room for. (You're torn between planting those pumpkins or a dozen rows of carrots!) Instead of having to forgo a crop you'd love to try, what if you grew it upright? By gardening vertically, you can use arbors, arches, fences, trellises, walls, and pots to create more growing space. You can even grow vertically to increase the amount of growing space in your greenhouse.



I love showing off my vertical space to friends and fellow gardeners. Their eyes positively light up as they realize how much produce they can grow in a small area! Let me relate briefly what is possible.

In a three-foot-square area of my garden, I can typically grow up to nine strawberry plants if I space them properly. Last year, I built a vertical strawberry planter that fit in that same space. It held seventy-two strawberry



plants with plenty of room for all of them, and they flourished! Best of all, they were easier to harvest and maintain than plants grown in the ground.

## *Why Gardening Makes You Happy*

Working with the soil and growing plants can provide significant benefits to your sense of well-being. Longtime gardeners, myself included, often claim that gardening helps alleviate depression and makes them feel happier.

In recent years, scientists have discovered a link between working with soil and lower levels of depression. Friendly bacteria in the soil have an effect on the human brain that's similar to antidepressants. Researchers from Bristol University and University College London (both in England) have discovered that a bacteria commonly found in soil, *Mycobacterium vaccae*, stimulates brain cells to create serotonin. Serotonin is the chemical that elevates mood. Most antidepressants work by stimulating the production of serotonin or by helping it bind to chemical receptors in the brain. So, improve your day by getting your hands dirty!

One of my favorite summer vegetables is cucumbers; they're lovely in a salad or sandwich. However, these plants vine freely, take up a lot of valuable ground, and attract slugs and snails. When I grow cucumber plants vertically, I can grow three plants on a trellis or netting in only four square feet of soil. Vertically grown cucumbers are straighter and have softer skins than those I grow along the ground, and they don't suffer anywhere near the same amount of slug and snail damage.

Pumpkin vines can grow at least fifty or sixty feet long, limiting what else you can plant in that space. When I grow pumpkins along the ground, I have to pinch the ends off the vines and continuously reposition them so they don't crowd out other plants. It's a lot easier to keep them under control if they're grown vertically, and training the vines to grow up a wall frees up valuable real estate in my garden.

## **The Advantages of Growing Vertically**

**W**hether you live in the city or the suburbs, you can maximize your productivity and grow your own vegetables, fruits, flowers, or herbs by creating a vertical garden. Even if you have a garden you're able to expand, applying vertical gardening techniques will help you grow more produce without having to work up more ground.

If only a small portion of your yard or terrace receives adequate sunlight, you can set out large containers in this area or fix smaller containers or trellises to walls or fences to take advantage of the exposure you get. Gardening in containers is also helpful if you don't have good soil in your growing space. You can purchase commercial garden soil or create your own mix. (See [page 52](#) for my favorite blend.)





You can plant in virtually any container that will hold soil and tolerate exposure to water. For instance, if you're feeling more whimsical than practical, you can create planters out of old rubber boots with drain holes fashioned in the soles. If you're feeling handy, you can drill large holes into a wide PVC pipe, cap the ends, fill with soil, then fix the pipe to a wall or fence to grow strawberries or other shallow-rooted plants. This process can also be used with old gutters.

Arbors, arches, and pergolas work well in larger gardens, allowing you to grow climbing plants or even attach pots for smaller plants. These structures can become a feature of your garden, and a seated arbor with scented plants on it provides a lovely place to sit.

Attractive fruit and vegetable plants will also add visual interest to a garden, patio, or yard. Look at the colorful flowers found on cucumbers, squashes, or runner beans. Even the fruits can be eye-catching. What about growing violet-podded French climbing beans, purple-podded peas, or yellow, orange, or striped tomatoes?

## *Epic Vertical Gardens*



Vertical gardening on a large scale can be quite impressive. Outside New Street Station in Birmingham, England, is a huge vertical garden, about 2,700 square feet in size and containing over twenty-five different types of plants—a welcome splash of color and greenery in an otherwise drab city center. I’ve also heard about a gardener in the US who’s growing thousands of lettuce plants in over-the-door shoe organizers that he’s hung on fences. In Florida, there are greenhouse growers who combine vertical gardening with hydroponics to grow massive amounts of fresh produce (typically lettuces and herbs) in tiny areas. In Malaysia, Singapore, and Thailand, vertical gardens are installed on the exteriors of buildings to provide much needed greenery.





Weeds are less likely to grow in a vertical garden. If you start out with a

sterile growing medium, the only weeds that will take root will come from seeds that blow in on the wind. Also, plants in vertical gardens tend to be more densely planted than in horizontal gardens, making it more difficult for weeds to get established. If weeds do develop, they're easy to remove because the soil will be quite loose.

Finally, anyone who suffers from back or mobility problems will find a vertical garden ideal because they won't have to bend over as much to care for their plants. I love being able to tend my garden while standing up and not having to bend over or crawl around.

## **What You'll Learn about Vertical Gardening**

**A**s you read this book, you'll learn about everything from planning a new vertical garden space to incorporating vertical structures into your current garden. I'll teach you how to maximize the use of your space and build a vertical garden as cheaply as you want. (You might be surprised how little investment you'll need to get an attractive, highly productive garden.) I will also show you how to determine the best place for your vertical garden in order to make the most of your sun exposure, protect your plants from wind, and arrange your plants so they'll grow harmoniously.

I wrote this book to share my passion for vertical gardening with you. It's a fantastic way to boost your productivity and maximize the yield from the space you have. By the time you've finished this book you'll be able to create your own gorgeous, high-yielding garden.





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