

ORGANIC FOOD GARDENING

A Guide to Green City Living



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LEARNING GROUNDS



Organic gardening works with nature to grow plants without the use of synthetic pesticides and fertilizers. Instead, organic gardeners feed the soil with organic matter, and use techniques such as crop rotation and plant selection to promote healthy growth. Using an organic approach maintains healthy soil, water and air naturally, providing a healthy environment for plants, animals and people.



Planning the Garden

No matter how big or small your space, start with a garden visioning session to get the creative juices flowing. This step is about brainstorming possibilities, and then matching them up with the realities of your garden space, local growing conditions, and your own time constraints.

A Note on Design

Design your beds to maximize the number of plants you can grow. A wide, raised bed can hold significantly more plants than a long and narrow bed. For example, a 1 x 4 foot bed may hold a single row of beets, while a bed measuring 2 x 2 feet has room for several shorter rows and will allow for staggered positioning. Although both beds take four square feet of garden space, the wide-bed design holds three times as many plants.



Building the Soil: Start from the Ground Up

Great organic gardens start with great soil that can retain essential nutrients and water. Soil testing kits are readily available at hardware stores and garden centres, and don't require any specialized skills. Don't panic if your soil's pH varies from the optimal range, or if the texture is unbalanced. You'll simply need to choose your plants carefully and perhaps use some soil amendments to create better growing conditions. The best way to restore balance to any soil is to add organic matter (compost).



Three Ways to Build Great Soil

Feed it with compost: Add finished compost or “compost tea” (made by mixing finished compost with water and letting it sit for a couple of days) to your soil before planting and around each individual plant.

Sheet mulch over the winter: Put your garden “to bed” after the harvest by covering it in a thick layer of mulch. The mulch will decompose, adding nutrients and preparing the soil for spring planting.

Grow a green manure crop: Grow one crop that can later be dug into the soil to add nitrogen. Plants that work well are those that are able to “fix nitrogen” (turn atmospheric nitrogen into a useable form for soil and plants) such as clover or alfalfa. Cut the crop when it is three or four inches tall, and use a digging fork to turn the plants and their roots completely into the soil. Cover the newly dug bed with a blanket of organic mulch until planting time.



Preparing the Bed

If you’re starting from scratch, the first step is to get rid of the turf grass (and weeds) covering your would-be garden. There are several ways to do this:

Sheet Mulching: A “no-dig” gardening method that allows planting directly into or on top of the ground. Cover the planting space (lawn, weeds, open ground) with several layers of varying organic material, ending up with a “sheet mulch” of at least 12–18 inches. Sheet mulching is best done in the fall to allow time for the organic matter to break down before spring sowing.

Double Digging: A fast (though labour-intensive) method of creating permanent raised beds with relatively good drainage and fertility. Loosen the soil more than 12 inches down in two separate layers; switch the lower layer of “subsoil” with the top layer (also known as “topsoil”). Organic matter gets mixed throughout.

Raised Bed: A mound of loose, well-prepared soil that is generally about 6–8 inches high. Adding edgings of brick, boards or stones for permanent beds, or re-form them each year. They are ideal if you’re working with heavy soils with poor drainage, contaminated soils, or if you are limited by space or mobility issues.



Did You Know?

A year’s supply of vegetables and fruit for one person can be produced on an area as small as 100 square feet.



Tip:

Once the season is in full swing, visit the garden often, and get to know your plants. Start a garden journal where you can record things like weather, what and when you planted, when certain pests emerged and how much you harvested.



It's Time to Plant!

Some crops can be seeded directly into your garden, while others are best transplanted as seedlings. Seedlings need to acclimatize or “harden off” before being planted—place them outdoors during the day, in a partially sunny spot, for one week before transplanting.

Succession Planting takes advantage of the fact that some vegetables grow more quickly than others. For example, if you plant spinach seeds in between your rows of carrots, the spinach will be ready for picking in six weeks, while the carrots will continue to develop.

Inter-Planting combines specific plants to avoid negative interaction, such as competition for space or light. For example, onions, carrots and lettuce have different leaf forms, light requirements and rooting depths. When grown together, the three plants all have access to sun, and their roots don't compete for space.

Companion Planting matches up mutually-beneficial plants to attract pollinators, improve soil, and protect crops from pests and disease. For example, the Three Sisters—pole beans, corn and squash—are traditionally planted together. Corn acts as a support for the beans, while the squash serves as mulch, preventing moisture loss and suppressing weeds, and the beans ‘fix’ nitrogen in the soil.

Planting in Tough Spots

Generally speaking, most edible plants do best in full sun and well drained soils. If you're stuck with sub-optimal garden conditions, here are some recommendations:

Depleted Soil	Shady Spots (4–6 hours direct sunlight)	Soggy Soil (Poor drainage)	High heat, Dry Soil
Arugula	Blackberry	Angelica	Amaranth
Blackberry	Chives	Bee Balm	Dill
Bronze Fennel	Currant (black or red)	Lemongrass	Garlic chives
Dill	Kale	Mint	Hot pepper
Lemon Balm	Leafy greens	Watercress	Jerusalem Artichoke
Nasturtium	Mint (in a pot)		Lavender
Oregano	Parsley		Okra
Radish	Peas		Oregano
Sage	Rhubarb		Prickly pear cactus
Mexican Sour Gherkin	Spinach		Purslane



Mulch is Magic

- Straw is excellent for veggies—apply a 4–6 inch layer that will last throughout the season, leaving a small mulch-free circle around the base of each plant to discourage rodents. Other mulch types include pine needles, leaves, newspaper and wood chips.
- At the end of the season, apply a layer of mulch over the entire garden so it can break down and add valuable nutrients to your soil for the following spring. When it's time to plant, either remove the mulch that remains, or work it into your soil to boost the organic matter.

Want to Know More?

- 1) *You Grow Girl: The Groundbreaking Guide to Gardening.* Gayla Trail. Simon and Schuster. 2005.
- 2) *How to Grow More Vegetables than You Ever Thought Possible on Less Land than You Can Imagine.* John Jeavons. Ten Speed Press. 2004.
- 3) *The New Self-Sufficient Gardener: the Complete Guide to Planning, Growing, Storing and Preserving your own Garden Produce.* John Seymour. DK Publishing. 2008.
- 4) *Organic Gardening:* www.organicgardening.com
- 5) *Garden Guides:* www.gardenguides.com

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