

Square Foot Gardening

“Sow seeds 2” apart in rows 18” apart.” Instructions like these are common on seed packets. But is sowing in rows really the best way to plant a garden? Mel Bartholomew, author of the book *Square Foot Gardening*, thought not. Taking up gardening in 1975 when he retired from his civil engineering career, Mel quickly realized that planting in widely spaced rows, while useful for large, mechanized, single-crop farm fields, didn’t translate well to small gardens of diverse crops.

He saw that planting in rows wastes space, wastes water, and encourages weeds. Much of the unplanted area — the footpaths between rows — could be productive growing space. When the garden is watered, the paths end up getting as wet as the crops, creating fertile ground for weeds.



Innovation Leads to Efficiency

The beauty of Mel’s square foot method lies in its simplicity. Garden space is divided into a grid, with individual squares measuring 1’ x 1’. These mini-plots are planted with a prescribed number of plants depending on the crop.

Plants are spaced closer together than in a row-based garden, which yields some important benefits. You get a larger harvest in the same-sized garden plot. There’s less bare soil, so there are fewer weeds to pull. The plants shade the soil, keeping it cooler and conserving moisture.

Compared to row-style gardening, this method is estimated to cost 50% less, use 20% less space, use 10% of the water, and require just 2% of the work, according to the Square Foot Gardening Foundation.

When Mel introduced the idea, many seasoned gardeners viewed this new-fangled technique with skepticism, but the idea quickly caught on — especially with beginner gardeners who weren’t stuck in the “but we’ve always done it this way” mindset.

Square Foot Gardening with Kids

Square foot gardening isn’t just efficient, it’s also fun! The grid design adds a playful twist, and invites imaginative planting plans. Because it cuts the amount of time needed for weeding, watering, and other maintenance chores, square foot gardening helps get even the most reluctant youngsters excited about gardening. And it offers fertile ground for real-world lessons in science, math, art, and nutrition.

Square Foot Gardening Basics

Raised beds. Although you can use the technique for in-ground beds, square foot gardening is much more successful when done in

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raised beds. Ideally, a raised bed should be 3' to 4' across so you can reach the center without stepping into the bed. If children will be tending the beds, choose a 2' or 3' wide bed.

Learn more: [Raised Beds 101](#)

Grids. Here's where the fun starts! Use narrow strips of wood tacked onto the bed lengthwise and crosswise to create 1' mini plots. You can also create the grid with twine stretched lengthwise and crosswise over the bed, but it's less visually appealing and may make it more difficult to get youngsters excited about the new technique.

Soil mix. Fill the bed with a freely draining, compost-rich soil blend. A key to success with the square foot method is a keen appreciation for the health of the soil. Because crops are densely planted and you're harvesting more from them, they need a continuous supply of nutrients. Depending upon the quality of your soil you may want to add slow-release fertilizers at planting time.

Crops. Just about any crop can be grown in a square foot garden. The key is to know each plant's mature size, so you can give them the space they require. Large plants, like peppers, and cabbages, require an entire 1' x 1' square. Medium-sized plants, like leaf lettuce and chard, are planted four to a square. Smaller plants, such as beets and spinach, can be planted nine to a square. Carrots, radishes, and other compact crops are planted 16 to a square. (Mel's book gives a complete rundown.)

Design. Let your inner artist shine! You can plan ahead by using graph paper to design your plot. Consider foliage shapes, sizes, and colors that will create a living work of art. If you're growing four squares of beets, for example, you don't need to place them all together. For example, plant each corner square with beets, with other crops in between. Separating crops in this way not only creates an attractive pattern, it also helps foil pests that may find one square of beets but completely miss the square of them at the other end of the bed.

Supports. Giving taller plants some support will conserve space even more. Cages and ladders can keep tomatoes and other rambling plants in-bounds. Set the supports at planting time and direct plant growth upwards, tying the stems with soft ties if necessary.

Maintenance. Your square foot garden will quickly transform into a beautiful array — think exotic mosaic or intriguing quilt — as the different plants begin to fill in their squares. Monitor soil moisture and water as needed. Soaker hoses are particularly useful, because they apply water at the soil, where it's needed. Overhead watering, on the other hand, can be wasteful, and due to the closely spaced plants, it may never even reach the soil underneath. A mid-season addition of fertilizer may also be helpful.

Succession planting. Fast-maturing plants like radishes will be ready to harvest in as little as a month after sowing. You can replant the square with a second ("successive") sowing of radishes or greens.

When summer heats up, bush beans and basil are good choices. Cucumbers and summer squash are also warm-season crops; however, the plants get quite large. Look for compact bush varieties and give each plant two squares along an edge of the bed so it can trail over. Or choosing a vining type and provide a sturdy trellis.

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As the growing season progresses, the work of art created by the foliage colors and shapes slowly transforms, too.

When it's time to put the garden to bed, remove spent plants and cover the soil with a scattering of shredded leaves, straw, or a cover crop to protect the soil over the winter.

Resources

[Compact Plants for Small Space Growing](#)

Square Foot Gardening, by Mel Bartholomew, was first published in 1981. The 3rd edition was published by Cool Springs Press in 2018.

Square Foot Gardening Foundation
<https://squarefootgardening.org>

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