# Square Foot Gardening - Simple, Versatile and Fun! 

By Harriet Custer
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## Simple model can be used in a variety of garden situations

Square Foot Gardening (SFG) is a form of "intensive" gardening that began in the late $19^{\text {th }}$ Century with French Intensive Gardening. More recently, intensive gardening became popular in the 1970s when John Jeavon's first book on "biointensive" gardening was published in 1974. Its popularity increased with Mel Bartholomew-often called the "father" of SFG-published his first book on SFG in 1981.

The primary benefit of SFG is that it can be used in a variety of home garden situations, particularly where space is at a premium. Bartholomew's method, in particular, is simple and low maintenanceno fertilizing and no weeding. As opposed to row gardening, a SFG is considered permanent, takes up far less space ( 20 per cent of the space for a single-row garden, according to Bartholomew) and, once established, requires virtually no maintenance.

While the classic model is a $4 \times 4$ foot square, providing 16 planting areas, a SFG can be long (such as $16 \times 2$ feet), very small, or even a container or pot. Bartholomew has developed guidelines for the number of plants per square foot, based on the size of the plant. Here are the steps suggested for creating a SFG:

1. Locate your garden close to your house for easy planting and harvesting. Your SFG, however, does not need to be in one space. Choose an area (or areas) that have a southern exposure, if possible-but that gets at least 6 hours of full sun.
2. There's no need to dig down. While Jeavon suggests double digging to lay an intensive garden plot, Bartholomew's method is far easier on the gardener's back. Locate your garden on top of the soil in a raised bed.
3. The key to SFG is the soil mix. Bartholomew suggests a ratio of $1 / 3$ vermiculite or perlite, $1 / 3$ peat moss and $1 / 3$ compost. Mix these three components well to create six inches of soil for each bed. Coconut coir is a good alternative to peat moss, and is a renewable resource, whereas peat moss is not. If you're purchasing compost, be sure to check the ingredients, which can vary considerably in available nutrients. If possible, make your own compost. Your SFG will not need to be fertilized; good compost provides all the nutrition your plants will require.
4. Make your SFG easy for you to access. This method is wonderful for those of us who have aging backs or are disabled-simply build raised beds at a height that's easy for you to reach, and that you can work while sitting down. No bed should be wider than 4 feet (and 3 feet is actually better), because you need to be able to easily reach the center of the bed for planting, harvesting and tending plants.
5. The grids in your SFG should be "prominent and permanent" (Bartholomew). Use twine or thin boards to lay out the plots. You'll be planting different crops in each square, so a visual grid makes planting easier.
6. There's no need to waste seeds. Because Bartholomew has designated the number of plants per square foot, based on the size of the plants, you can plant just enough seeds. For example, there's no need to use 6 cabbage seeds when you'll only have one cabbage plant! Make the recommended number of holes in the square and pinch a couple of seeds into each hole. When the seedlings emerge and the time has come to thin, snip off the tops of the seedlings you don't want, rather than disturbing the soil by pulling them, and leave them on the soil to compost.
7. Keep it simple. SFG minimizes the need for weeding because intensive planting suppresses weed growth, as the leaves of the plants quickly fill in and shade the soil (Gilkeson 2014). Succession planting is also easy. When the plants in one square foot have been harvested, just add a trowel full of compost, mix it in, and plant again.
8. Grow vertically. By installing a vertical frame to one end of your raised bed and adding netting, you have space for cucumbers, pole beans, peas or other vining crops.


Square Food Gardening (SFG) is a model for gardening that can be used in virtually any situation to make small-scale gardening easier, more accessible and more cost-effective. Photos by Harriet Custer / WSU Skagit County Master Gardeners.

Bartholomew recommends the number of vegetables, based on the size at maturity, that you can plant in one square. The spacing guidelines (www.squarefootgardening.org) are

- Extra-large (i.e., nightshades, cabbage, broccoli)-one plant per square for 12-inch spacing
- Large (such as kale, potatoes, strawberries) - 4 per square for 6-inch spacing
- Medium (bush beans, large beets, spinach) - 9 per square for 4 -inch spacing
- Small (carrots, onions, radishes, small beets)-16 per square for 3-inch spacing

Square foot gardening is being used in a variety of educational situations, from schools in Minneapolis to international foundation-based initiatives in communities across South and Central America, the Caribbean, Asia and Africa. The Square Foot Garden Foundation (http://squarefootgardening.org/), and Gardening World Wide (http://www.gardeningww.org) for example, teach SFG to families and communities as a route to self-sufficiency, creating fresh produce, improving soil conditions, and conserving water.

SFG is a model for gardening that can be used in virtually any situation to make small-scale gardening easier, more accessible, and more cost-effective. In addition, the methods outlined here promote sustainable, organic gardening practices. You can see a demonstration SFG garden in the Enabling Garden at the WSU Extension Master Gardeners' Discovery Garden on Memorial Highway in Mount Vernon.

## RESOURCES:

- Bartholomew, M. (2013). All new square foot gardening: The revolutionary way to grow more in less space, $2^{\text {nd }}$ Edition. Minneapolis: Cool Springs Press.
- http://www.gardeningww.org
- Gilkeson, L. (2014, February/March). Intensive gardening: Grow more food in less space ( with the least work!) Retrieved from Mother Earth News: https://www.motherearthnews.com/organic-gardening/gardening-techniques/intensive-gardening-zm0z14fmzsto
- Jeavon, J. (2012). How to grow more vegetables, $8^{\text {th }}$ Edition. New York: Ten Speed Press.
- http://journeytoforever.org/garden_sqft.html
- http://www.squarefootgardening.org

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Note: some hyperlinks in this article have been updated since its initial publication.

