

THE FACTS OF Square Foot Gardening



Reviewed by

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Square foot gardening is a method of intensive gardening. The term “square foot gardening” (SFG) was coined by an American author, Mel Bartholomew, who wrote a book under that title. This gardening practice is ideal for residential areas. SFG is gaining in popularity because it makes gardening easier and results in high productivity compared with the space used.

Quite simply, SFG allows vegetables and flowers to be planted very close together in raised beds that can be framed with natural, nonrotting wood such as cedar. The beds can be anywhere from 2 feet by 4 feet to 4 feet by 12 feet, with the most common configuration being 4 feet by 4 feet.

In most cases, the soil is “designed” by the gardener to have optimal drainage. The soil usually consists of a combination of sandy loam and generous amounts of sphagnum peat moss or well-matured compost.

For uniformity in texture and particle size distribution, we have found that a portable concrete mixer that can plug into a simple household electrical outlet is the best way to mix the designed soil. Basically, the sandy loam is mixed in a ratio of about four parts of sandy loam with one part of sphagnum peat moss or compost. An alternative to mixing your own soil would be to select from one of the high-quality bagged soil products on the market.

The advantages to SFG are:

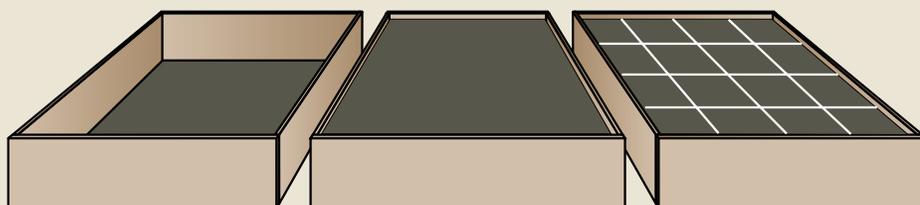
- The soil stays friable (easily crumbled or pulverized) because you never walk in the squares.
- You can harvest many more vegetables because you're planting in blocks instead of rows.
- The squares are much easier to water because you aren't wasting water between rows. The same holds true for fertilizer.
- You have less weeding to do because the garden has no rows between plants and every square foot is dedicated to vegetables.
- Pest control is easier.
- You rotate crops by square instead of location.
- The squares are more aesthetic and require far less work.
- You don't need to till each spring.
- You can build trellises at the north ends of the squares to grow vining plants such as peas, beans and squash vertically, which saves even more space
- This type of garden warms faster and drains better than traditional gardens.



Photo by Todd Weinmann, NDSU

The soil in square foot gardens should be a minimum of 6 inches deep, but 12 inches is better to accommodate root crops such as carrots, potatoes and parsnips.

To construct a square foot garden that is slightly above grade, obtain nonrotting wood (cedar or pressure-treated wood free of arsenic) that measures 4 feet by 12 inches by 2 inches and form a square. Then add the soil and add the divisions. The first SFG — 16 square feet — is ready to be planted.



1

Construct the square

2

Add soil to the square

3

Add the divisions



Another advantage of SFG

is that the raised beds spare the gardeners' back. SFG can allow seniors to enjoy freshly harvested vegetables much longer than they can with the more physically demanding method of conventional gardening. It also will inspire young people just getting started in gardening who have limited space and time to enjoy the good health that comes from consuming fresh produce grown in their own back yard.

To learn more about square foot gardening, visit www.squarefootgardening.com/.

This publication was authored by Ron Smith, Ph.D., former NDSU Extension Horticulturist, Department of Plant Sciences, 2012

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Photo courtesy of Gardener's Supply

Designs can differ. This photo shows a square foot garden that's 8 feet long, 2 feet wide and 29 inches tall, with rot-proof cedar siding. It also contains a false floor 10 inches from the top for root vegetable growth.

For those who don't want to design their garden, at least one prominent mail order catalog offers a SFG package.

Here are examples of what you can plant in each square foot:

- 9 onions, beets, bush beans, bush peas, garlic or spinach
- 16 carrots or radishes
- 4 lettuce, chard, marigolds or kohlrabi
- 1 tomato, pepper, eggplant, broccoli, cabbage or corn
- 1 squash, cucumber or melon per 2 square feet
- 6 vining plants, such as beans or peas, on trellises

Here are some examples of the quality of crops produced:

- Hardneck garlic
- Deliciously long carrots
- Tomatoes such as the Sweet Million

Photos by Ron Smith, NDSU