



Square Foot Gardening
Texas A&M AgriLife Extension Service
Hays County

Cooperators: Hays County Extension Education Association Members

Author: Richard Parrish

Summary

Many people have a renewed interest in growing their own vegetables. Because of a variety of factors (space limitations, physical limitations, poor soil, etc.), some immediately dismiss the possibility of gardening. Alternative methods of gardening need to be explored to provide all an opportunity to garden and provide fresh produce for themselves and their families. Square Foot Gardening is one method of gardening that can address many of the arguments against raising a vegetable garden.

Objective

The objectives of this demonstration are to:

- Highlight a method of gardening that can be done anywhere, regardless of soil type or space limitations.
- Provide an outlet for gardeners with physical limitations.

Materials and Methods

Square foot gardening is a gardening concept that is based upon planting in one square foot plots. To accomplish this, a raised bed needed to be constructed. A 4' x 4' raised bed was constructed using 2" x 8" untreated lumber. A 4' x 4' bottom was attached to the raised bed using a piece of ¾" plywood. Holes were drilled in the plywood to allow for drainage.

To accommodate the gardener with physical limitations, the raised bed was placed on two saw horses. It was ensured that the saw horses

were strong enough to hold the raised bed as well as stable enough to allow working in the garden without risk of the garden falling and injuring an individual.





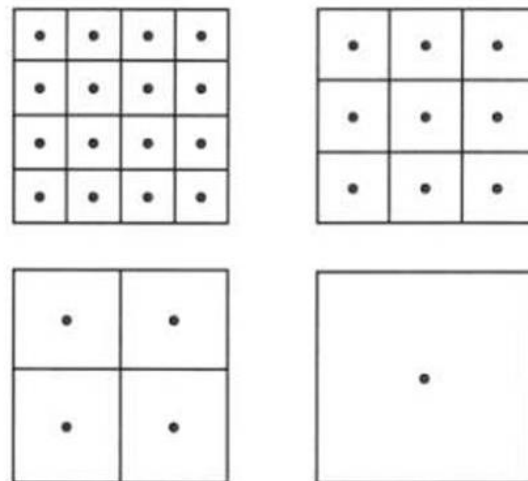
Once constructed, the square foot garden was filled with a mixture of soil and compost. Strings were attached to the top of the square foot garden to form a grid of 16 one square foot plots. Seeds were planted in each of the plots. The seeds selected for this project included marigolds, lettuce, cauliflower, beets, and carrots. The garden was watered using water collected from a rainwater collection system.

Depending on the mature size of the plant, grow 1, 4, 9, or 16 equally spaced plants per square foot. If the seed packet recommends plant spacing be 12 inches apart, plant one plant per square foot, if 6 inch spacing; 4 per square foot, if 4 inch spacing; 9 per square foot, if 2 inch spacing; 16 per square foot.

Plant one seed in each spot by making a shallow hole with your finger. Cover, but do not pack the soil. Thinning is all but eliminated. Seeds are not wasted. Extra seeds can be stored for two or more years. Don't over plant. Plant only as much of any one crop as you will use.

Water only as much as each plant needs. Water often, especially at first, and on very hot dry days. Harvest continually and when a crop in one square is gone, add some new compost and plant a new different crop in that square.

PLANTING METHODS IN ONE SQUARE FOOT



Results and Discussion

Seeds were planted in the square foot garden in September. The garden was placed in an area that is in partial shade. As a result, the vegetables did not grow as fast or as large as they would have had they been in full sun. A freeze on December 25, 2012 caused some of the plants to die. No precautions were taken to protect the plants from freezing.

This square foot garden met the objectives of the project. This sixteen square foot plot provided a growing area for what would have normally been grown in a 10' x 10' conventional garden. This is important to those that have a limited amount of space to have a garden. This is also of benefit to those who might live in apartments and wish to have a garden. While this garden was 4' x 4' in size, it could easily be made smaller to accommodate space requirements. While the square foot garden used in this demonstration was elevated, it can easily be placed

on the ground as a raised bed. It could be made longer if desired. The 4' width is recommended, however, because of the ease of reaching across the garden.

This method of gardening can also be of benefit to those with physical limitations. For those people who have troubles stooping or bending down, having the garden placed on saw horses allowed for them to easily tend to the garden. Another benefit to this type of gardening is that only two fingers are needed to plant the seeds. Had this garden been placed in a different area, it could have been reached and tended to by those bound to a wheelchair.

Production from the garden was decent, despite the shaded conditions. Lettuce, carrots, and beets were all harvested from this garden.

In the spring, the garden will once again be planted with seeds for a spring garden. Prior to planting, the garden will be moved to an area that receives full sun. As vegetables mature and are harvested, the square foot plots will be replanted with other vegetables, depending upon the season of the year.

Conclusions

The square foot method of gardening has definite potential for those that have a limited amount of space or for those who have physical limitations that prevent them from having a conventional garden. While one square foot garden of the size used in this demonstration will not provide for all of the nutritional needs of an individual or a family, it can help to provide a relatively inexpensive source of fresh vegetables. It can also provide an environment for a person to receive the health benefits of tending to a garden: physical activity and relaxation.

Acknowledgements

Thanks are extended to members of the San Marcos Extension Education Association. They were instrumental in getting the garden established and tending to the garden throughout the season.

Trade names of commercial products used in this report is included only for better understanding and clarity. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by Texas A&M AgriLife Extension Service and the Texas A&M University System is implied. Readers should realize that results from one experiment do not represent conclusive evidence that the same response would occur where conditions vary.