Master Gardener Corner: Starting a Vegetable Garden

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Seed companies have been reporting a rise in seed sales, especially for vegetables and herbs. Given the current situation it’s not surprising more people have decided to start a vegetable garden this year. Before you build a raised bed or start to dig up the back yard, first come up with a plan.

A well-planned vegetable garden can provide fresh, nutritious vegetables for the whole family. If this is your first garden, be careful not to start with too large a space as it will certainly lead to more opportunities for weeds to aggravate you. You may decide to start with container gardens rather than digging up part of the lawn. Before you buy seeds and plants, make a list of the vegetables you would like to grow. Create a garden plan that allows space for plants to mature. To maximize space in the garden, look for smaller varieties or bush varieties rather than vining types of cucumbers and squash.

Should you buy seeds or plants? Planting seeds directly into the soil is the easiest method of starting vegetables in a garden. Easy to grow seeds include lettuce, peas, beans, radishes, beets, summer squash (zucchini) and winter squashes. Some vegetables can be tricky to start from seed, some are slow growing and others take a long time to mature. Those are the vegetables that you should buy as transplants. Tomatoes, peppers and eggplant are good examples of vegetables usually bought as transplants, unless you opt to start them from seed indoors.

Almost any vegetable can be grown in a suitable container and many crops now have varieties that have been especially bred for growing in containers. Another option would be to use raised beds. If your soil is poorly drained, raised beds are the way to go as they will provide good drainage. Raised beds are also great for gardeners with mobility problems.

If you decide to go with the traditional in the ground garden, the first thing you need to do is pick the site. Look for a spot that gets full sun as most vegetables do best with eight hours of direct sunlight per day. While some herbs and some greens can make due with less light, vegetables such as tomatoes, eggplants, peppers, squash and cucumbers all need full sun. If you are blessed with good soil, consider yourself lucky. Adding organic matter can improve soils that have too much clay or sand. A flat site would be preferable to a sloped area. Also look for a site that is out of strong winds. Too much wind can knock down plants and dry out the soil. Plants need an inch of water per week, so make sure you have easy access to water in case Mother Nature does not provide what you need.

Site preparation is the most important step. This includes removing any existing vegetation (turf or weeds), soil testing, tilling the soil and fertilization. Perennial weeds and sod need to be removed before any digging begins. Gardens infested with weeds produce fewer vegetables because the weeds compete for soil nutrients, water, air and sunlight. Weeds also provide a home for insects and diseases.
Cultivating with a garden hoe once a week will generally prevent weeds from getting a foothold in the garden. Use caution when cultivating around vegetable plants as you do not want to damage their root systems. Never allow weeds to go to seed in the garden. Weeds that have gone to seed should not be added to the compost pile. To prevent weed growth lay down mulch in pathways and between rows. Generally, a two to three-inch layer of organic mulch is sufficient to suppress weeds.

If you have never had your soil tested for pH or nutrient levels consider having it done. Vegetable gardens produce well in a soil pH of 6.0 to 7.0. Having your soil tested is a good way to find out the fertility level of your soil. It will help you determine how much fertilizer or manure you will need to add. Fertilizers should be fully incorporated into the soil prior to planting in spring. Checking your soil pH will tell you whether or not you need to add lime (which would raise the pH). For more information on soil testing, contact your local Cornell Cooperative Extension office. Most CCE offices can check your soil pH but for a full nutrient test you will have to submit it to a soil testing laboratory.

Do not dig if the soil is cold and wet as that will lead to soil compaction. If the soil sticks to your shovel or shoes it is too wet. You can do a quick check by picking up about half a cup of soil in your hand. Squeeze the soil together so that it forms a ball. Press the ball with your finger. If the ball breaks apart the soil is dry enough to start working. If the ball holds its shape, it is still too wet. Soils with a high clay content will feel slick when rubbed between your thumb and finger. Clay soils tend to stay wet longer than loamy or sandy soils.

Once the soil has dried you can start tilling. The soil should be tilled to a depth of 6 to 10 inches. Do not over till your soil as that breaks down the soil structure. A good seedbed is necessary to get good seed to soil contact. Use a garden rake to level the garden and remove stones and other debris. Now you are ready to plant.

One caution - don’t go overboard if you have never planted a vegetable garden before. A small successful garden can produce a surprising amount of fresh produce this summer but a large garden full of weeds will be a disappointing venture.

The Cornell Garden Based Learning site has a variety of resources for vegetable gardening at http://gardening.cals.cornell.edu/garden-guidance/foodgarden/.

Sources for this article include: Cornell University, North Carolina State University, University of Minnesota Extension and Missouri Botanical Garden.