Think you need a big garden to successfully grow a lot of fresh vegetables? Not really. In fact, spaces as small as 4 ft x 4 ft can yield substantial amounts of fresh produce. One good approach to small spaces is high density or “intensive” gardening.

What is high density or intensive gardening? It is growing individual plants close together, following the minimum spacing recommendations listed on the seed packet. There are two main benefits to using this method. First, you end up with a smaller garden area by minimizing the unused space between rows and individual plants. Second, vegetables grown close together block out most weeds.

Several options are available for high density plantings. One method, promoted by Mel Bartholomew, is based on “Square Foot Gardening.” (It is also known as French intensive gardening.) In this method the bed is divided into 1-foot squares. Vegetables are selected for each square; the number planted is based on their size and spacing requirements. For example, one square might be planted with a single cabbage (a fairly large plant); another square might be planted with 5 lettuce plants, or 12 onions, or 16 radishes. Placement of plants takes into consideration how they fit together; for example, tall plants should not shade plants that need full sun. In addition to the benefits listed above, since there are no huge blocks of any one vegetable variety with this method, destructive insect pests have a much smaller target.

A second method, from Colorado State University Extension, uses larger planting blocks that are 3 to 4 feet wide. This method eliminates unnecessary pathways and also uses the minimum recommended spacing specific for each vegetable. It still crowds out weeds, but does provide a larger target for insect attack.

Raised beds are a perfect structure for intensive gardening. If your soil is rocky, raised beds are the best option for vegetable gardening anyway. A raised bed is made from four pieces of timber nailed or screwed together to form a rectangle. Do not use pressure treated timber, since some contain heavy metals and other hazardous materials which may be harmful to you and/or the plants. In good soil conditions, sides 4-6 inches high will work, but rocky soils require higher sides of 8-12 inches. Stapling aluminum screen material or welded wire mesh to the base of the rectangle will discourage voles and moles. For the growing medium use a commercial soil blend or make your own! Then plant vegetables in the raised bed following the principles of intensive gardening.
High intensity gardening is particularly suitable for containers; just remember that you need good soil and good drainage.

How large an area do you need? A general rule is that two plots, each 4ft x 4ft in size, will provide salad crops and other vegetables for one person for a season.

Intensive gardening requires planning and takes into consideration plant interrelationships (e.g., growth patterns and shade tolerance). But planning is half the fun; so give it a try!

A raised bed with a high density planting of lettuces, leeks, radishes, broccoli, spinach and herbs.