

Gardening in Raised Beds

At the Botanical Garden we grow all our vegetables in raised beds. A raised bed is a prepared area with a soil level that is higher than the surrounding soil. We love our raised beds and here are the reasons why:

Improved soil conditions

Compaction of the soil can reduce crop yields dramatically. Water, air and roots have trouble moving through soil that has been packed down by implements and human feet. You can avoid this problem by constructing beds that are four feet maximum in width and narrow enough so that you never have to walk on the soil. Raising the soil depth makes it easier to grow root crops such as carrots and beets. Raised beds are the answer for areas that have poorly drained soils. Building up the soil level allows plant roots to develop in soil above the soggy zone. The small area of a 4' x10' bed is easier to manage in regards to soil structure, nutrient- holding capacity and drainage.

Expanded season

When the soil is elevated it dries more quickly and warms up faster. You can plant earlier in the spring and harvest later into the fall. In wet seasons, the soil will dry out faster, allowing for planting between rainfalls. Raised beds can increase soil temperatures by 4-6 degrees over ground level soil temperatures.

Maintenance

Once constructed, raised beds are easier to prepare and care for during the growing season. With all your crops in their own little space you can manage the soil in each bed to suit each crop. Intensively planted raised beds provide dense foliage cover which shades out much of the weed growth. The narrow linear shape of the bed makes the use of row covers and plastic mulches easy. Slug traps can be placed on walkways to 'head 'em off at the pass" before they reach the beds.

Higher yields

Better root growth from improved, deeper soils means more production per square foot of garden. Raised beds do not need the usual space between rows as no walking is done in the bed. Vegetables can be planted in raised beds at higher densities- hopefully spaced just far enough to not be crowded and close enough to shade out weeds.

Disadvantages

Like many other gardening techniques, raised beds have a couple of disadvantages. The close spacings can promote plant diseases by reducing air circulation and allowing plants to remain damp longer after rain or watering. Normally, with the amount of wind we have here, air circulation is not a problem. Another problem might be the watering requirements. Raised beds will dry out faster than in-ground beds. It is not uncommon for us to water the vegetable garden every day during hot sunny weather. Soaker hoses and mulches can cut down on the time and amount of water you use.

Construction and layout

Our beds are constructed of 2'x12' planks, on edge. We have painted the outsides and left the insides

untreated. We don't want nasty chemicals leaching into the soil to be taken up by our veggies. Avoid pressure-treated lumber and stay away from creosote coated beams. The life span of an untreated plank is 6-8 years, not bad considering all the advantages of this system. Layout follows general vegetable garden guidelines. Orient beds in North- South lines to take advantage of maximum sunlight. Plant taller crops on the eastern side to avoid shading lower crops.

One final note and my favorite reason for using raised beds. You don't have to bend over so far! Yes, 1 foot higher makes it a lot easier if you are doing it all day.

Carl White
Head Gardener
MUN Botanical Garden