Urban Harvest

Raise Production by Raising Beds

By Suzy Fischer

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It's been over 20 years since Bob Randall began promoting raised garden beds for vegetable production in the Greater Houston area. Today, we almost take it for granted if you plan to grow vegetables, you grow them in a raised bed, at least eight inches high. Some of us, though, still keenly remember why we plant in raised beds. When I first moved to Houston, I joined four friends to build a vegetable garden in a sunny side yard at a house owned by one of the eager gardeners. We each chipped in $100 for tools and supplies and decided to build a traditional country row garden like the ones we grew up knowing.

We thought we would tackle the Houston gumbo soil by double digging our plot. Double digging is an old garden technique in which you remove 18 inches of soil (double the depth of a normal shovel's blade) from the planting area, and refill it with the existing soil amended with organic matter. In our case, we used compost and peat moss.

The result is a garden bed full of organically rich, well-aerated soil that is clean of roots and debris. It was back breaking work, but we thought it was worth the effort to be able to produce home-grown vegetables in soil that was better suited to making clay pots.

We planted our furrowed rows and tended the garden on a regular basis. The spring, however, was wetter than usual and we were plagued by a variety of fungal diseases. The tomatoes were a no-show and the squash looked like something aliens left. We did harvest some beans; one bowlful. I can tell you're doing the math and you're right, it was a $500 bowlful of beans!

If you are one whose back doesn't still remind them of the benefits of raised beds, let's review the reasons we have embraced this method of vegetable gardening.

Soil

The soil in the Houston area, for the most part, is heavy gumbo clay. It is impossible for the delicate root system of seasonal vegetable plants to thrive in the soil without significantly amending it.

Planting in raised beds allows you to bring in an organically rich soil that is friable, allowing for strong root development. A soil mix of one part topsoil, one part sand and one part compost will permit your vegetables to flourish.

Drainage

Raised beds provide excellent drainage for plant roots, especially during extended rainy periods. In a plot that is planted using furrowed rows, water stands in the valleys between the rows limiting the oxygen that reaches the roots, essentially drowning the plants.

Building your vegetable bed up also allows you to create a level plot. When the garden does need supplemental water, it can be distributed evenly over the area instead of running off at the low end of the bed.

Higher Yields

The country row method is efficient for farmers in rural areas who work their crops with large equipment, but they buy their land by the acre. In urban areas, we buy our land by the square foot, so it is essential that our production method have a better layout.

Growing in a raised bed four feet wide provides for intensive planting by eliminating the space that would have been left for pathways in the furrowed row method. The four foot width allows you to easily reach into the middle of the bed from both sides. This intensive style of planting can increase production up to 70% over the traditional row style.

The organically rich and friable soil that was used to fill the beds will also increase production by feeding the plants instead of suffocating them.

Maintenance

Intensive planting means denser foliage covering the soil which inhibits weed growth, so less time is needed for weeding. For other garden chores, raised beds mean less bending down to the ground and your beds can be constructed to allow sitting on the bed edge while working in it.

Over the years, we have come a long way in how we build raised beds. I remember visiting the Fifth Ward Garden in the late eighties and seeing they had used everything but the kitchen sink to raise their beds, including concrete rubble, old carpet samples, recycled sheet metal, some stone and a smattering of landscape timbers.

For the past several years, Urban Harvest has advocated the use of eight inch square solid concrete blocks. They are relatively inexpensive and heavy enough to stay in place and hold the soil, but not too heavy that they are difficult to work with.

Urban Harvest staff horticulturist, Mark Bowen, likes concrete retaining wall materials such as Pavestone's Windsor Wall system for giving the bed a refined appearance. The pieces are sixteen inches long by eight inches wide by four inches tall and stacked to the desired height for the raised bed.
Whether you dress it up with a concrete masonry unit like Windsor Wall or stack the concrete rubble from your old front sidewalk, the important part of vegetable production is to get your growing area up off the ground.

This column is produced by Urban Harvest. Learn about gardening classes, community gardens and orchards, farmers' markets and more at **www.urbanharvest.org**.