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**Make Gardening Easier by Using Raised Beds**  
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There is nothing like a fresh, ripe tomato from your own garden. Raised bed gardening is popular because it can be easier to produce your own vegetables without requiring tiller. In addition, the raised bed supplies a solution for a poorly drained site, allows the soil to be amended easily to provide better growing conditions, fits in small spaces, and reduces the amount of stooping required to maintain the garden.

Raised beds are usually at least 6 to 8 inches in height above the soil surface. It may be higher if necessary to make it more accessible for harvesting and removing weeds. A frame to support the soil may be constructed of untreated wood, stone, concrete block, brick, or recycled plastic boards, or soil may be mounded without a rigid structure. Woods naturally resistant to decay include cedar, redwood, and black locust.

The length of a bed will vary according to the space available. Make the width of it easy to reach across. Typically it should be no more than 4 feet wide in order to reach into the bed from either side comfortably. Soil compaction is avoided by not walking in the bed, which allows plants to grow better. Maintaining an aisle of 2 to 4 feet between beds permits easy access with tools, hose reels, chairs, or wheelchairs.

Full sun is the best location for vegetable gardens, however many vegetables will produce a good crop if they receive 6 hours of direct sunlight a day.

Locate it away from trees if possible so that the roots will not grow into the bed and compete with the vegetables for water and nutrients. Do not place gardens near black walnut (*Juglans nigra*) trees since walnuts produce a compound in their roots, shoots, and leaves that is toxic to many plants including several vegetables.

To make life easier, locate your beds where water is readily available. Raised beds dry out quickly and require more frequent watering than conventional gardens.

In preparing soil for the bed, adding components such as organic matter and porous material will improve soil structure. An ideal soil for raised beds consists of equal volumes of good garden soil, organic matter such as compost, peat moss, and porous material like vermiculite or perlite. If good quality garden soil is not available, substitute with additional organic matter. Lime and fertilize as recommended by a soil test of the finished soil mix. Adding too much lime and fertilizer can result in poor plant growth.

After the soil is prepared, there are several ways to plant the bed. You may choose to plant in rows in the bed, or simply group similar plants together by maturation time or height. Keep in mind that a diversity of plants will promote a more stable ecosystem. Monoculture, or grouping together the same or closely related crops, may result in more pest and disease issues. Plant diversity tends to encourage beneficial insects and microorganisms in the planting area. You may even want to include a few flowers in your garden to increase the variety of plants being grown.

Plan to intensively garden the space to produce more vegetables. For example, cool season vegetables such as spinach, lettuce, cabbage, and broccoli can be replaced after harvesting

with warm season vegetables such as tomatoes, beans, peppers, squash, and corn. Then cool season vegetables can be planted again in the fall. Another way to garden intensively is to train plants vertically when possible.

Remember that it is a good practice to move plants around if your gardening space allows. For example, if you have multiple beds, don't grow tomatoes and related crops like potatoes, peppers, and eggplants in the same bed for more than 2 or 3 years. Give the soil a break from tomatoes and related crops for a couple of years by moving them to another bed, growing them in containers, or not growing them at all. This will prevent soil pests from building up to high numbers that will eventually negatively impact the performance of your plants.

Remember that raised beds may dry out faster than conventional gardens. A layer of mulch will reduce weed growth and water loss. A 1- to 2-inch layer of organic mulch such as compost, straw, or grass clippings will slowly break down and contribute organic matter to the soil. A few layers of newspaper beneath organic mulch will help to prevent weed germination.

At least 1 inch of rainfall or supplemental irrigation per week is best. If supplemental irrigation is applied, it is better to use drip or soaker hose irrigation since these tend to direct water to the root system and not onto the plant itself. Watering the entire plant, especially late in the evening, allows water to remain on the foliage for several hours. This may promote disease problems. Therefore, it is best to water in the morning if it is necessary to use some type of sprinkler that wets the entire plant.

For more information, contact the Daviess County Cooperative Extension Office at 270-685-8480.

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## Question and answer:

Where can I find more information on raised bed vegetable gardening? Two publications, ID 126, “Home Vegetable Gardening in Kentucky” and “Gardening in Small Spaces” are available at the Daviess County Cooperative Extension Office or online at <http://ces.ca.uky.edu/daviess/horticulture>.

You can also visit the Extension Master Gardener Raised Bed Demonstration Garden at the Daviess County Cooperative Extension Service Office at 4800A New Hartford Road on the Owensboro Community College Campus.

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