



### **Raised Bed Gardening**

Written by Carrie Murphy, Extension Educator

October 2024

# What are the advantages of raised beds?

**Better Drainage:** A raised bed permits plant roots to develop in soil held above water-logged, potentially contaminated, or compacted sites. You can easily incorporate compost and other organic material to ensure good drainage.

**Higher Yield:** Yes, it's possible! Through intensive planting and the use of good soil to promote healthy plant growth, you can grow a healthy harvest and increase your yield.

**Extended Growing Season:** The soil warms up faster in the spring, allowing you to plan and grow earlier in the season. Quick and easy covers can be used with a raised bed to begin early or extend the season well into the winter.

**Easier Access and Maintenance:** Depending on the height of the bed, you can minimize the bending you'll need to do while working in the garden (weed, water and more).

*Challenging Site:* A raised bed can make gardening possible in small spaces and also where growing plants would otherwise be impossible, particularly in urban areas where paving and/or potentially unhealthy (contaminated, rocky, or otherwise poor) soil is present.

### What materials can be used in the construction of raised beds?

- Cedar and cypress are good choices because they are naturally insect and decay-resistant.
- New pressure-treated woods, such as pine, are safe but should not be considered for organic gardening.
- Recycled lumber can last about as long as cedar and cypress and fits into a philosophy of reuse.
- Cinder Blocks, bricks.
- There may be other choices- use your imagination!



Community gardeners clean up a raised bed growing strawberries in the E.D. Robinson, 12<sup>th</sup> and Brandywine Urban Farm in Wilmington.

Availability, price and durability are factors to consider when selecting the materials you will need to construct a raised bed. A variety of raised bed kits, often pricier but the materials are all inclusive, are also readily available. DO NOT USE recycled tires or lumber treated with creosote or pentachlorophenol, such as railroad ties.

When building a raised bed on suspected or confirmed contaminated soil, asphalt, or concrete, use a barrier fabric between the raised bed and its soil, and the contaminated ground. Specifically, geotextile fabric is recommended; for more information, contact your local Cooperative Extension office.



Raised beds are built on top of asphalt in Duffy's Hope Youth Garden in Wilmington.

#### Raised bed design

Typically, raised beds are laid out in a square or rectangular pattern. However, be creative to meet your needs. Consider the gardener(s) you are accommodating, accessibility (reaching all sides of the raised bed without climbing into, and compacting, the soil), any space limitations, and the amount of growing space you need.

**Width:** 4' (four feet) is a convenient width for beds because the center of the bed is easily accessible from either side, and wood is readily available with this length.

**Length:** typically 4' or twice this length at 8'. **Depth:** At least 1' to accommodate enough soil to grow a healthy and productive garden.

Again, consider accessibility and your gardener(s); beds can be much taller to accommodate, for example, gardeners who have difficulty bending or need wheelchair accessibility. Visit local community garden sites to see a variety of raised beds before you make a decision\*.

Sample your soil to be sure the site where you're building your raised bed has healthy soil. As long as the soil is healthy, you can remove any existing vegetation. Also, break up and loosen the ground soil so that it's not compacted to allow for better drainage and then level the area to create a more even surface before you build and site your raised bed. Make pathways between raised beds wide enough for easy access to beds. Plan on at least 4' paths for walking access and for wheelbarrows, garden carts, and gardeners who might need more space to navigate and work in the bed.

#### Soil

Fill your raised bed with a good quality topsoil and compost blend. Raised bed bag mixes can also be purchased at your local garden center. Soil is the foundation, and the most important ingredient, of your garden. It is worthwhile to invest in a good bagged or bulk mix. Contact your local Cooperative Extension office to learn more about soil, including testing, mixes, availability, the amount you will need, adding organic matter, and more.

# When and where to plant your raised bed garden?

The best time to begin building a raised bed is in the fall or early winter. But do not work the ground soil if it is too moist. Your raised bed must be sited so that it receives at least six hours of direct sunlight per day (preferably in a north/south orientation), good drainage, and easy access to a water source. By the time spring arrives, the soil in your raised bed will have settled, and you'll be ready to plant.

#### What to plant?

Keep it simple at first and then expand as you become comfortable with the crops that grow well in your location. Cool season crops to try: peas, lettuce, Swiss chard, radishes, and beets. Warm-season crops to try: tomatoes, peppers, green beans, cucumbers, and herbs like basil or oregano. For additional suggestions, as well as growing information, contact your local Cooperative Extension Office.

#### \*Visit local gardens to see what's growing (New Castle County gardens are listed, but contact your local Cooperative Extension office for additional sites)

- UD Cooperative Extension Master Gardener Demonstration Garden, 461 Wyoming Road, Newark, Delaware 19716
- Planting Hope Urban Farm, Herman Holloway Campus, 1901 N. Dupont Highway, New Castle, Delaware 19720
- E.D. Robinson, 12<sup>th</sup> and Brandywine Urban Farm and Community Garden, 1116 E. 12th Street, Wilmington, Delaware 19802
- Bellevue Farms at the Bellevue Community Center, 510 Duncan Road, Wilmington, Delaware, 19809
- Food Bank of Delaware Farm, 222 Lake Drive, Newark, DE 19702

This information is brought to you by the University of Delaware Cooperative Extension, a service of the UD College of Agriculture and Natural Resources — a land-grant institution. This institution is an equal opportunity provider.