Raised Bed Basics

Some basics for raised-bed success:

1. Good dimensions are two to four-feet-wide, 12 to 24-inches high, and as long as desired. A four-inch board fastened to the side of each raised bed provides a seat for easily working and stretching.

2. Typically, raised beds are bordered by permanent paths for easy access to the growing plants and to make weeding in the beds’ enclosures easy. Create wide, mulched paths between the beds to keep the weeds down and provide a soft cushion underfoot.

3. Select a level location that receives full sun most of the day preferably near a water spigot. Measure the area and place stakes in the ground to determine the size and shape of the beds.

4. Using a garden fork and spade, clear the land of weeds and turf where the beds will be installed.

5. Durable, long-lasting wood like oak, black locust, cypress or cedar are recommended. Raised beds can be made of stones or bricks. Avoid wood or plastic that might leach chemicals into the soil. Or apply a heavy plastic liner between the treated wood or plastic frame and your garden soil allowing for soil drainage. For instructions about ways to preserve wood that will be used.
increased root growth. Vegetables can be planted among flowers and herbs. Each spring, they provide a patchwork quilt of possibilities.

The disadvantages include the up-front labor and expense, the beds can dry out quickly if the weather is hot and dry, and planting is limited around bed dimensions and configuration.

Design your garden with personal physical capabilities in mind and keep the area small enough to maintain. Raised beds can be any height. With wide sides, you can sit while you work. Anyone who has difficulty walking, a spot next to your house on the southern side for full-sun exposure and access to kitchen, water spigots, and hoses is ideal. Raised beds lift plants higher so they are protected from early spring, frost, deter rabbits, pets, and they form a natural barrier from grass and weeds. Taller varieties, such as tomatoes or other veggies or flowers requiring a cage, are planted in the center so shorter plants around the edges are not shaded from the sun.

**Table Beds**

A table raised bed is essentially a shallow wooden frame with a large surface area and a mesh bottom that allows water to drain. Legs are any length you desire or the framework can be set on saw horses or other supports. A table raised bed is portable, versatile, easy and inexpensive to build –using untreated construction lumber– and terrific for gardeners of all ages, sizes, and abilities. Untreated spruce, pine, and fir will last about four to eight years; painted or stained, about eight to 12 years. Western cedar lumber will last about 12 to 15 years.

The bed can also be moved to capture sunlight in spring and fall and avoid the sun and high heat of summer. Gardening is accomplished comfortably at waist level –about 36-inches tall– and avoids problems with rabbits and groundhogs. Dimensions can be easily adjusted to meet individual needs. A table bed is great for growing fresh greens and herbs close to the kitchen door.

A typical growing media can be used in a table bed. For salad greens, the rows should be four inches apart and seeds should be planted in straight furrows. The frame can also be used to grow garden transplants. Members of the cabbage family (arugula, kale, mustard, broccoli) will germinate the fastest –two to four days. Lettuces are six to ten days. Spinach, chard, basil, and cilantro will take seven to ten days to germinate.


6. The two-layer cement block raised bed is wide enough to top with wood all around for placing your garden tools within easy reach or sit comfortably while you work. Cement blocks, cinder blocks, and concrete blocks are made with cement and fine aggregates such as sand or small stones. Fly ash, a byproduct of burning coal that contains heavy metals and other hazardous waste might be included in cement blocks. If you select cement blocks, the blocks could be sealed with polymer paint.

7. Use either exterior nails or screws to secure the boards with metal corner brackets. For detailed raised bed building plans, visit https://www.udel.edu/content/dam/udelImages/canr/pdfs/environmental-stewardship/HowToConstructRaisedGardenBed.pdf.

8. Fill beds with a combination of 65 percent screened topsoil, 20 percent compost, 10 percent well-aged manure, and 5 percent peat. https://extension.umd.edu/resource/harvesting-plants-grown-salad-tablestm-or-salad-boxestm. Partially replace the soil each season to avoid soil-borne diseases. Bagged mixtures are also available at big box store garden centers.

9. Select vegetables, herbs, & edible or decorative flowers that vary in size, height and texture. Place taller plants at the center and shorter ones along the edges.
The growing media should be kept moist; water lightly every other day until seedlings emerge. Then water about one quart daily. After seedlings emerge, fertilization is recommended. Add more fertilizer before planting a second crop.

**Garden Tools**

Garden tools are important for the enjoyment of gardening and for continued health and mobility. Many manufacturers have redesigned garden tools to ease the strain and discomfort of routine activities, such as kneeling, cutting, lifting, pulling, and pushing. There are short handle trowels, rakes, shovels and hoses. Try them out, especially for weight and ease of use, before you buy, or get recommendations from other physically-challenged gardeners or local garden centers. Taping foam tubing around shovel handles can make them softer and/or provide a wider grip. A carpenter’s apron or fishing vest can become a tool carrier. A mailbox placed in the garden can hold tools to avoid multiple trips to the shed.

Some tools you own can be easily adapted to fit your needs. Or, for instance, choose lightweight pruners or loppers with gear mechanisms or telescoping mechanisms to reach higher. Rotating handles that relieve stress on hands and arms will increase cutting power. Lightweight and sharper hedge shears, telescoping pruners, loppers, rakes, hoes, and cultivators reach farther. Trowels with curved ergonomic and cushioned handles for easier digging and weeding tools to help lift out weeds rather than pulling them out are recommended. Some kneeling pads have gel inside or a frame to help with standing up and then becomes a sturdy bench when turned upside down. Lighter weight wheelbarrows or garden carts with wide handles designed to push or pull with one hand are a boon. Long-handled watering wands for hanging baskets or timed drip irrigation are easier to use than pulling a garden hose.

"Your raised bed garden or table garden can become a magnificent food source as well as look like a still life painting with flowers for home decoration and herbs for cooking," states Sussex County Master Gardener, Bob Williams. An online workshop given by Bob is available at https://www.youtube.com/watch?v=xGF45SP2HUM&list=PL1-ZR4Jwy4glDGuD8FFcUfJR9Gwk1stC7M&index=5

**Questions**

For questions on this subject or any gardening topic call the Master Gardener Helpline: In New Castle County, (302) 831-8862; in Kent County, (302) 730-4000; and in Sussex County, (302) 856-2585 x 535. The Master Gardeners monitor the Helpline in the winter but it may take a few days to get back to you.

For more information about Master Gardener workshops, garden helplines, presentations, becoming a Master Gardener Volunteer, or other activities, please visit these websites.

UD Website - https://www.udel.edu/academics/colleges/canr/cooperative-extension/environmental-stewardship/master-gardeners/

DSU Website- https://cast.desu.edu/cooperative-extension/agriculture-natural-resources/delaware-master-gardeners