Raised Beds

Create a home for better veggies

BY LINDA CHISARI

Raised beds solved many of the garden problems that faced me 20 years ago in our new Southern California home. Among the challenges were terrible soil, a concrete-paved yard, arid growing conditions, small children, and a big, exuberant puppy. When we read the real estate agent's description of our house-to-be, four words eclipsed all others: "perfect backyard for pool." To me, those words meant a warm southern exposure and a sizable empty space in which to plant a vegetable garden.

The sizable sunny space turned out to be about 2,000 square feet of concrete pavement. True, it was large enough for a decent-size garden. But also true was that what little soil existed was heavily compacted and lacked organic content. Once before, we had been faced with difficult growing conditions. On a granite ledge with no soil in New Hampshire, my husband had built a raised bed where I grew a small salad garden. So I figured, why not design a system of raised beds that would allow me to grow vegetables at this new home?

Decide on the materials and a design

There were a number of reasons why raised beds seemed the perfect way to garden. First, my husband was an accomplished carpenter and could build the boxes. Second, we could leave the concrete in place and simply break up the portions under the boxes to provide drainage. Soil quality was a third reason. We were able to fill the beds with

soil by using compost from our own pile and supplementing it with some topsoil and chicken manure. This created a great growing medium.

Because we live in a Mediterranean-type climate with less than 10 in. of rainfall per year and almost none between April and November, we knew we would have to irrigate. Raised beds allowed us to set up an irrigation system that included a hose bib in each box. This would allow us to water each bed independently.

It didn't take long for us to see that our raised beds had several unanticipated advantages. Our golden retriever loved to race around the beds but rarely jumped into them. Our children could easily ride their Big Wheels around the obstacle course we had unwittingly developed for them. And neither of these activities nor my gardening compacted the soil because no one ever walked on it. It remained fluffy and well aerated, allowing plant roots to grow freely.

I wanted eight raised beds, and I wanted them made out of wood. Construction-grade redwood, which contains knots and some imperfections, seemed like a logical choice because we knew it would last many years and would cost less than many other types of wood.

The design of the beds was based on practical considerations. The dimensions, 8 ft. long by 4 ft. wide, were derived from the fact that lumber is available in 8-ft. lengths, so there would be minimal cutting and no waste. I could comfortably reach only 2 ft. into the beds, so a width of 4 ft. would allow access to the middle of the



Pressure-treated alternatives

If you'd like to avoid using wood treated with chemical preservatives for your raised beds, here are a couple of options:

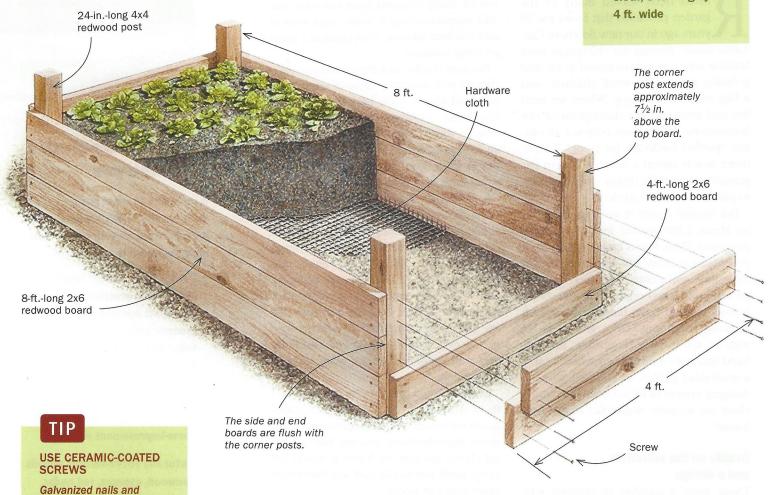
- Recycled-plastic lumber
 Many of the plastic milk bottles, detergent containers, and grocery bags we recycle are being mixed with wood fiber to make a new generation of decking material: composite lumber. This recycled-plastic lumber is now available in many home-improvement stores.
- Naturally rot-resistant woods Redwood, cypress, red cedar, and black locust are all, to varying degrees, rot resistant. They can be expensive, though, and supplies may be limited by region.

Blueprint for a raised bed

- 1. To make the corner posts, measure and cut the 8-ft.-long 4x4 into four 24-in. lengths.
- 2. To make the long sides of the bed, nail three 8-ft.-long 2x6s one at a time to two corner posts; you will have boards stacked three high. The bottom board should be flush with the bottom of the post, while the top board should end approximately 7½ in. short of the top of the post. Repeat to form the second long side.
- 3. Cut the remaining three 2x6s in half to yield six 4-ft.-long 2x6s for the short ends.
- 4. Stand the two long sides of the bed parallel to each other, approximately 4 ft. apart. Nail the 2x6 end pieces to the corner posts, three to each end. Align them so that they are flush with the posts. The raised-bed form is now complete.
- 5. If you're worried about gophers or moles, staple an 8-ft.-long by 4-ft.-wide piece of ½-in.-square hardware cloth across the bottom of the box. This allows drainage and root growth but keeps the critters out.

What you'll need (per bed)

- One 8-ft.-long 4x4 redwood post for the corners
- Nine 8-ft.-long 2x6 redwood boards for sides and ends
- 1-lb. box of 3½-in.long ceramic-coated decking screws
- ½-in.-square hardware cloth, 8 ft. long by



screws are perhaps the most common outdoor fasteners, but they don't play well with redwood. A chemical reaction can occur and stain the wood. So use ceramic-coated decking screws instead.

beds from either side. I measured several of our chairs and found that they all had a seat height of 16 to 19 in. Because we had decided to use 2x6 redwood, we could stack the boards three high and end up with a finished height of 16½ in. (the actual width of a 2x6 is 5½ in.). This made

the edge of the box a comfortable height on which to perch and gave more than enough root space for the plants.

The boards were screwed to 4x4 corner posts that extend nearly 8 in. higher than the sides. I sometimes drape bird netting for pest protection or row covers for





Measure, mark, and cut the side posts. You'll need only one 8-ft.-long 4x4 post for each bed because you'll cut it into four equal pieces, one for each corner (left). Attach three 8-ft.-long 2x6s to the corner posts with nails (right).

warmth over the posts. The paths between the beds are 3 ft. wide to accommodate a wheelbarrow.

Accessorize your bed

Beds can be customized to meet a variety of specific needs. For some clients, I've designed beds that have a 6-in.-wide board or "cap" around the edge to make sitting more comfortable. (This makes it more difficult, however, to turn the soil.) For other beds, I've extended the corner posts up to 8 ft. to allow the attachment of trellises for beans, cucumbers, and other climbers. In gopher-prone areas, I've designed beds that have hardware cloth tacked across the bottom. For some beds, I've devised a system of hoops, using PVC irrigation pipe, over which to drape bird netting or row covers to keep cabbage loopers out.

I have experimented with several irrigation products, including microemitters, soaker hoses, and drip pipe. I prefer the flexible soaker hoses available in most hardware and garden stores. They can be snaked in any configuration and are easily removed when it's time to turn the soil. I use inexpensive chopsticks to keep the hoses in place.

Because the price of redwood has risen, many clients ask about using less expensive pressure-treated wood. I discourage them from making this choice because I'm not comfortable using chemically treated products around food crops. (See alternatives on second page of article.)

It has been 20 years since we built our beds, and we are beginning to see signs of wear that indicate we need to start rebuilding. They have certainly been a good value, having held up to blasting sun and year-round cultivation. Where there was once only concrete, the soil is now black and rich and teeming with earthworms. The eight beds also make crop rotation easy to track. Everything I've grown in the garden has thrived.

Over the years, we have slowly removed the concrete paving between the boxes and replaced it with a thick layer of pea gravel that allows the little rain we get to percolate into the ground. And it crunches delightfully underfoot. Because the vegetable garden is the primary view from our kitchen window, it has been an added pleasure to look out on the raised beds with their profusion of vegetables, herbs, and edible flowers spilling over the edges. Thanks to the raised beds, we can enjoy homegrown produce every month of the year.

Linda Chisari is a landscape designer in Southern California, where she gardens year-round.



Pull it all together. Stand up the constructed long sides of the bed so that they are 4 ft. apart and parallel to each other. Complete the bed by nailing the short 4-ft.-long 2x6 boards to the posts.