

Vertical Gardening

Article by Meredith Kaplan, Alameda County Master Gardener
Photos by Kate Henderson

Vertical gardening, or trellising, has much to offer the garden designer: it can screen eyesores such as trash barrels, compost piles, or air conditioners; create garden rooms; or offer privacy screens. For the vegetable gardener, trellises save garden space, keep plants and their fruits off the ground, and improve vegetable production by exposing more flowers and fruits to the sun. Beans, winter and summer squash, peas, cucumbers, and tomatoes can be trained on trellises. Perennials such as landscape vines, grapes, and kiwis can be used for more permanent effect.



Scarlet runner beans and sweet peas climb a trellis made from tree branches and prunings taken from elsewhere in the garden. They screen the compost bins from view.

There are many options for making or acquiring vertical supports for plants; the trick is building ones that meet the needs of your particular plants. At our Lake Merritt Trials Garden, we use several kinds of trellises. Mostly, we use cages made of concrete reinforcing wire. A 5-foot wide roll of reinforcing wire with a 6-inch grid forms the circumference of cages that can be made at any height. The cages can be attached to the soil with metal pins like those for irrigation pipe or by metal or wooden fence posts. In these we grow tomatoes, summer squash, and beans. The 6-inch grid allows room for hands to reach the fruits for harvesting. Pumpkins can be grown in such cages and the heavy fruit supported with a 1x6 board slipped under the pumpkin and supported on the sides of the cage.

One issue with cages is that the plants can become compacted within the space, making harvest difficult and also preventing the sun from reaching all the tomatoes. If you have a south-facing fence, you can support plants by attaching 1x2s to the fence at an approximate 5-foot spacing (the size of the wire roll) and secure 1x2-inch grid wire to them. In addition to tomatoes, winter and summer squash, green beans, cucumbers, peas, and sweet peas do well on such a trellis. Or simply tie strings to the top of the fence, and with some management, tomatoes, beans, and peas will wind themselves up. Plants can be seeded or transplanted at about 6 to 8 inches from the fence. Renee's Garden has developed another solution to trellising heavy plants—an angled wire fencing support system that seems to provide easier harvest and offer space for shade-loving plants beneath it. Directions for this system appear at <http://www.reneesgarden.com/articles/tomato-support.pdf>.

Trellises can also be attached to the back of wooden worm bins or raised planters, put in containers, or used to add height to a fence. They can be bought ready-made or created from materials you have around the garden. At our trials garden, we have built a trellis for our scarlet runner beans and sweet peas from pruned branches. It screens the compost bin from the

garden view. Also, we have installed a traditional bean teepee. For this, simply tie three large bamboo or other wooden poles together at their tips and spread the legs into a tripod shape. Anchor them into the soil. Beans will find their way up the poles. Strings can also be attached to hang down in the spaces between the legs; the beans will wrap around them, too.



Next door to the Master Gardener Trials Garden, the Merritt College horticulture classes have constructed an arbor that, with strings attached, provides a structure for pole beans to climb.

Arbors can provide a welcoming entrance to a garden or mark the beginning of a new garden "room." These, too, can support edible plants as well as perennial vines. At Lakeside Park Open House at Lake Merritt on July 14, you can see how the classes at Merritt College have created an arbor that cleverly supports many bean plants and also see the several types of trellises used in the Master Gardener Trials Garden.

Come to the celebration and stop by our garden to get your questions answered and pick up helpful resources. We will be available from 11:15am to 3:00pm. In addition, at 12:30pm, Master Gardener Sam Foushee will describe the steps for making "garden gold" compost.

If You Go

WHAT: Lakeside Park's Open House

WHEN: Saturday, July 14, 2012, from 11am to 3pm

WHERE: Lakeside Park, 666 Bellevue Avenue, Oakland, CA - Garden entrances are located near the Lake Merritt Sailboat House and Lawn Bowling Courts.