University of California Sonoma County Master Gardeners

Gardening on a Slope

By Steven Hightower, SCMG

What happens if you take a level garden design and tilt it up 10, 15, 25 degrees? In other words lay that design on a hillside? The design has to change, perhaps quite a bit. Many of the gardens on the Master Gardener Bloomin' Backyards tour on June 6 of this year have had to deal with slopes. Two of the more significant hillside challenges were Linda's and Jan's gardens. These two gardeners have met those challenges using tried and true solutions, with some innovative tricks.

In addition to normal gardening issues, particular challenges hillside gardening must be considered:

- Erosion control and retaining the hillside—to terrace, or not to terrace
- Plant selection and location—for erosion control and relating to water needs and exposure
- Access to the beds or plantings for maintenance and upkeep
- Rainwater and Runoff —turning rainwater from a problem to an asset
- Irrigation—maximizing watering efficiency and dealing with water needs zoning and water behavior on slopes

The degree of slope, or steepness affects all of these considerations. A very gentle slope is not much different than a 'flats' garden, but a steeper slope certainly is.

See <u>Gardening on a Hillside</u> for more details on these challenges and some solutions.

Linda's Garden



Linda's garden style is generally Mediterranean--she is quite interested in drought-tolerant plants, natives and in rain gardens and rain collection. She built her now four-year old Prairie style home on a long, narrow sloping lot perched high above the street. The garden was very thoroughly thought out, and installed over a three-year period starting before the house was finished.

She combined both terracing and slope planting in creating her hillside garden. In the rear, the steeper slope was first cut to create level areas, and retaining walls installed to hold the terraces. In the front garden, she left the slope un-terraced, and created a dry creek that allows rainwater to percolate into the soil. Her garden is divided into 'rooms' with those nearest the house containing the thirstier plants: roses, deutzia, philadelphus, rhododendron and some hydrangeas as well as a Japanese maple and some bananas. In fact she's hydrozoned her whole garden, and made sure that plants with similar water

requirements are on the same drip irrigation valves. The planting up the slope moving away

from the house becomes more drought tolerant, with dodonaea purpurea, ceanothus, teucrium, callistemon, lavandula, lots of grasses, and drought-tolerant perennial flowers and fruit trees.

Linda says "designing for a slope can be a challenge. I found that using retaining walls to create flat, usable spaces was critical. Since it's important to have areas in the garden where one can sit, and, since having patio areas can help cut down on the amount of area needing to be planted, it's important to carve level areas out of a hillside garden. Although this can be expensive, it really makes the garden much more usable."

Like all hillside gardeners, she also had to deal with runoff and irrigation. Linda is a strong advocate of both rainwater capture, and storm water management--in other words, not allowing lots of rain to run into the storm drains unused--so she set up a system of berms and swales to direct and capture that rainwater, noting "I do a Master Gardener Library Series talk on capturing rainwater and keeping it in your garden and I like to practice what I preach!" She also states, "I keep the entire slope heavily mulched at all times--mulch is a critical part of holding water on a slope."



Like Sara's garden, featured last month, Linda's concentrates more on shape and foliar



texture and color than flowers. She says "I planted for color and texture interest with pops of flowering color to give it continual interest." For example in one area she planted purple-leafed sambucus with yellow-leafed deutzia, and on another slope she mixed ceanothus 'dark star' with spiky grey teucrium fruiticans, callistemon and echium fatuosum to form a huge grey-green mass of texture with a hit of dark green.

Another design criteria was the winds in Petaluma. This was accommodated by providing patio areas near the house protected by the wind, and planting hedgerows of trees and shrubs along the southwest property line to help buffer the wind. That hedgerow also includes Vitis californica 'Roger's Red', Sambucus, Chaenomeles, and Rosa californica to provide food in the winter for birds and animals.

Jan's Garden

Jan and her husband didn't have a lot of space due to their lot being located on an old rock quarry on a slope. Lots of rocks, and huge roots from a neighboring 100-year-old pine were special problems. In addition, a city-owned hillside above their lot would send rainwater sheeting downhill to wash across their front yard.

Their primary weapon was terracing—they built an interconnecting series of raised beds and decks. Don built brick planters and stone terraces using some of that quarry rock, and those became the backbone of their garden. Drip irrigation is zoned to take care of watering the different beds and levels. A berm was built across the slope on the uphill side of their



property to divert the rainwater away from their front yard and down the easement into the street gutter—simultaneously solving their runoff problem and allowing the storm water a longer path to soak into the ground before reaching the storm drains.

Jan says of her gardening style that the garden is a sort of a specimen garden, with a leaning toward a Japanese style.

She says "I am an admitted plant addict. . . .when I see a plant I love, I usually buy it. Lately I'm trying very hard to purchase only things I have a good place for." She likes color and cut flowers, and has zinnias, roses, dahlias and sunflowers in a side garden. The front garden was recently remodeled and high-maintenance perennials have been largely been replaced with an all-season garden of shrubs and trees emphasizing shape, form and foliage. She accents the form and foliage with splashes of seasonal color using impatiens and begonias in summer, and a few bulbs and Icelandic

poppies in winter. Jan continues "I have many succulents which bloom, ferns, hosta, orchids and a fuchsia house—but I'm trying to cut down on the constant maintenance."

Hardscape can be a very important part of designing hillside gardens. In level areas or on terraces, flagstone or gravel allows rainwater to percolate into the ground. Stonewalls can be part of the hillside terracing. In that new front garden, Jan's son built a dry stacked wall to create a garden room, and add further visual appeal to the garden.

These two gardeners faced similar challenges in different circumstances, and successfully used the tools of the hillside gardener to create spectacular AND water efficient gardens.



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