



Gardening on a Hillside

In addition to normal gardening issues, particular challenges in hillside gardening have to 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
- Irrigation—maximizing watering efficiency and dealing with water needs zoning and water behavior on slopes
- Rainwater and Runoff —turning rainwater from a problem to an asset

To Terrace, or Not--hillside retention and erosion

Hillside retention and erosion control are two key issues in slope gardening. You really have two choices, which are partly driven by aesthetics, partly by cost considerations and influenced by steepness: to *terrace*, or *not to terrace*. The steeper the slope the better the garden will behave if terraced. Terracing is attractive, and also helps prevent runoff and allows rainfall to seep into the soil. And the steeper the slope, the closer together the terraces will be.

Methods of creating and holding terraces include stonewalls, wood frames, like a larger version of half a raised bed, concrete retaining walls, and more. Leaving the slope un-terraced is the less expensive route, possibly by far, depending on the method of terracing you would otherwise employ. In the end, if you can afford it, you will probably have a better, and more useable hillside garden if it's terraced.

If you leave your slope natural, plant selection is doubly important. You don't want shallow-rooted plants on a hillside, but rather you want deeply rooted plants to help retain the hill and avoid erosion. Perennials that have deep root systems and well-rooted grasses and small and medium shrubs perform this function well.

Plant selection

What to plant on a slope, and where on the slope to plant various species are key considerations. The larger the root system the better, so trees are great, with their extensive roots. Shrubs require less maintenance than perennials, and in addition, generally have a more extensive root system.

Shrubs which are great for slopes include *Arctostaphylos*, *Ceanothus*, *Erica*, *Helianthemum* and *Euonymus*. Drought tolerant selections include *Baccharis pilularis* 'Twin Peaks', *Cistus*, *Correa*, *Grevillea*, *Mahonia*, *Rhamnus* and *Rosmarinus*.

Larger plants, shrubs and trees should be planted vertically, not pointing out of the hillside. This actually makes each plant a mini-terrace. Build a small half well on the bottom side of the plant to help retain water and allow it to soak into the soil around the plant. Smaller plants and groundcovers to fill in while larger plants take hold can simply be planted flat with the hillside.

Composting to amend soil is usually a good idea—certainly if your hillside soil is sandy or clay. Hillside gardens, like all gardens should be well mulched. But the choice of mulch is more critical. Things like straw, small bark or cocoa hulls will just wash away. Finely shredded redwood, known as angel hair, or the coarser shredded rather than chipped mulches tend to knit together into a mass, and are less (but not completely) susceptible to being pushed downhill by rain. Two that hold well are called mixed fir bark, and vineyard mulch.

Irrigation

Since hand watering of a hillside garden is not very convenient, you'll want to install drip irrigation. Alternatively, if you're interested in a low-water slope garden, you can select very drought tolerant plants, and elect to hand water them for their first two summers, rather than installing irrigation.

Plants put at the top of a slope will get the least water, those in the middle somewhat more, and those near the bottom the most, as water running downhill section is soaking in more and more. Accordingly, within whatever water-use segment you're planning the garden, the most drought tolerant should go toward the top, and those that can tolerate more water closer to the bottom. Exposure plays a factor too. And the direction the slope faces will impact plant selection: southern and western exposures are hotter, and northern and eastern can take plants that can stand less direct sun.

Access and maintenance

Access to a hillside garden is necessary for maintenance, weeding, pruning and watering, and can take different forms. If a very small garden, access can be from the edges. Larger gardens require access to the innards, via paths, walkways or steps. Steps down the slope portions, and paths more appropriately access terraced gardens across the terraces. Naturally sloping gardens can be accessed by paths down and across the grade.

Rainwater and Runoff Management

This is interrelated with irrigation, plant selection and erosion control. Rainwater can be an enemy of a hillside garden. Unchecked, it can cause serious erosion. Rain running down the hill and off the garden into city storm drains is a problem that municipalities and water agencies are striving to correct.

Rain can become an asset, and runoff turned into irrigation with proper design. Terraces accomplish this inherently by providing level garden areas for the rain to soak in and not runoff. Where a slope is not terraced, berms across the hillside with narrow swales behind, and winding stone-lined creek beds can slow the movement of water, allowing it to soak in. A rain garden at the bottom of the slope allows the last of the runoff to gather and irrigate thirstier plants assembled there.

So although a hillside garden can present a greater challenge than flat ground—but, if that's the topography you have there are solutions to those challenges that can lead to a beautiful, ecologically sound and success garden.

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