

Climate Zones: Tools For Good Gardening

By: Jerri Jennings, DalsnRoses@worldnet.att.net, Camarillo, CA

So you want to grow really good roses . . .

Roses aren't that difficult to grow, but to be really successful, you must first select the right roses to grow in YOUR garden. The wrong roses in the wrong garden add up to disappointing roses and a disappointed gardener. CLIMATE, and indeed, MICROCLIMATE, are among the most important factors to be considered when making these selections. You can grow roses in any U.S. Climate Zone - but some roses will perform better than others - and the task will be easier in some Zones than in others.

The importance of climate has given birth to two systems for charting Plant Hardiness Zones. Both systems are important tools in the selection of roses and other garden plants.

[USDA Climate Zones](#)

The United States Department of Agriculture offers an 11-zone Plant Hardiness Zone Map, which factors in average winter minimum temperatures. This smorgasbord of information starts with Zone 1, (where minimum temperatures go down to a brutal MINUS 50 degrees Fahrenheit) and ranges to Zone 11, enjoyed by gardeners in Hawaii and extreme Southern Florida (where lows don't drop below 40 degrees Fahrenheit).

The data on which the USDA map is based was gathered over a period of 60 years, principally by two independent groups: The Arnold Arboretum of Harvard University (Cambridge, Massachusetts) and the USDA in Washington, D.C. Additional data is added every year, and the USDA Climate Zone Map was last updated and released in 1990. The numbers on this map are the zone numbers often provided in rose catalogs and books, and they are valuable tools if you know how to use them.

A plant sold as "Hardy to Zone 7" should endure winter temperatures as low as 0 to 10 degrees Fahrenheit. A plant "Suitable for Zones 7-9," should tolerate Zone 7 winters, but will probably not do well in summer temperatures higher than those found in Zone 9 (Central Florida, the Gulf Coast, Texas, and much of California).

Zone 1 gardeners will experience the nation's harshest winters, and under these conditions roses (and indeed most other plants) must be regarded as annuals. Zone 11 gardeners, on the other hand, enjoy a tropical absence of cold winter conditions. For them, roses will bloom throughout the calendar year. Match the color shown for the area where you live, and you'll know what USDA zone you are dealing with. Click on the appropriate area for an overview of your climate range, and general recommendations for plant selection. Remember, in referring to this zonal chart, that it is broadly painted, with little attention paid to local variations.

"Sunset" Magazine's [Western Climate Zones](#)
(you must be a subscriber to see their climate zone maps)

Gardeners who live in the Western United States may make use of a much more detailed 24-Zone system, created 40 years ago by Sunset Magazine. The Sunset Zone Maps cover 13 Western States (Washington, Oregon, California, Idaho, Nevada, Arizona, New Mexico, Colorado, Wyoming, and Montana). If you garden in one of these states, the Sunset Climate Zones are just what you need, and you will find them in the Sunset Western Garden Book, as well as the Sunset Western Garden CD-Rom.

"Sunset's" 24 climate zones are much more detailed than the USDA maps, taking climate characteristics down to very local levels. Their calculations take into account six factors:

DISTANCE FROM THE EQUATOR (latitude - locations farther from the Equator experience longer, cooler winters),

ELEVATION (higher elevations experience longer, colder winters and lower night temperatures),

PACIFIC OCEAN INFLUENCE (more ocean influence results in a more moist atmosphere, milder winters, and fall, winter, and spring rainfall patterns),

CONTINENTAL AIR MASS INFLUENCE (locations further inland experience cooler winters, warmer summers, and rain at all times of the year),

MOUNTAINS AND HILLS (mountains and hills act as barriers that affect weather patterns),

LOCAL TERRAIN (warm air rises, cold air sinks).

The USDA Climate Zone Map lumps my coastal Southern California area into Zone 10, along with most of Southern California. Checking **Sunset Western Garden Book**, however, I find that I am located in Sunset Zone 23, ". . . *one of the most favored climates in North America for the growing of subtropical plants.*" Here, frosts are rare and mild, and the Pacific Ocean is the determining weather factor 85% of the time. My zone "*lacks the winter cold*" needed to succeed with pears, apples, and most Northern European once-blooming roses. (As a trade-off, I CAN grow Teas and Chinas, and pick tomatoes in December.) The neighboring city of Ventura is in Sunset Zone 24 - an area almost completely dominated by ocean influence, with cool summers, ". . . *often of limited sunshine because of daily high fogs, and . . . air [that] is seldom really dry.*" Ventura shares this Zone with the rest of a narrow Southern California coastal strip, while inland Greater Los Angeles varies from Zone 18 to Zone 23. "Sunset" offers this sort of detailed breakdown for the entire area encompassed by its study.

Neither climate zone system is error-proof, and the element of "Microclimate" is a powerful factor to be considered in plant selection. The USDA Zones, in particular, are based on very wide areas. The chart considers low temperatures without regard to local conditions - and local conditions can strongly affect your immediate Microclimate.

Cold air flows like water, down hills and through canyons. It can pool like water to create localized areas of low temperatures. A sun-warmed garden wall can create an island of protection in a Zone nominally too harsh for a cold-tender plant. Fences, highways, asphalt parking lots, and other random factors exert a strong influence on Microclimate, and conditions may even vary from one end of a garden to the other. In other words, gardening is, and probably always will be, a matter of trial and error, and nothing replaces the value of personal experience. Experienced gardeners know that a rose that shines in Memphis, Tennessee may be a dreadful disappointment in Southern California or Oregon. A rose that is a star on the California coast may fail to perform in a hotter, inland climate.

When making plant selections, the wise beginner looks to more experienced gardening friends for advice on dealing with local conditions. The knowledge they have gained through experience is a treasure beyond price. In fact, your best reference source will probably be a Consulting Rosarian in your own immediate area - easy to contact through your local rose society.