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Healthy Garden Tips

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CREATING MICROCLIMATES IN THE GARDEN

Adapted from article by Peggy Sullivan, Tulare/Kings County Master Gardener

Most of us live in USDA hardiness zones 8 or 9. Sunset zones for Napa include 7, 14, 15, and 17. Within these broad zones we have microclimates based on elevation, slope, and exposure of any particular site. With a little creativity it is possible to "stretch" the growing zone one and sometimes two zones each way by creating microclimates within the garden.

Many microclimates already exist in your yard. Do you have an area that remains moist after it is watered? Do you have a large oak tree that needs dry soil around its base? Is there an area on the north side of your house where it seems that nothing will grow? You can find plants that will thrive or tolerate each of these microclimates.

Consider these four common microclimates:

- Dry soil in sun
- Dry soil in shade
- Moist soil in sun
- Moist soil in shade

The following will give you some ideas for plants to use in each of these microclimates:

DRY SOIL IN SUN: This is the most common microclimate in our valley during our summers. Use water thrifty plants that need no extra irrigation after the first year. Select shrubs like Matilija poppy and flannel bush (*Fremontodendron* sp.) or Carmel creeper groundcover (*Ceanothus griseus* var. *horizontalis*). Other suggestions are silver bush lupine (*Lupinus albifrons*), sticky monkeyflower *Mimulus aurantiacus, Salvia clevlandii*, red monkeyflower (*Mimulus longiflorus* var. rutilus), lavender, rosemary, native ornamental grasses, Agapanthus, lemon thyme and bougainvillea (needs some frost protection).

DRY SOIL IN SHADE: Dry shade can be a challenge. Plants to use for this microclimate include native shrubs such as western redbud (*Cercis occidentalis*), *Ceanothus* (*C. griseus*, *C. thyrsiflorus*, *C. maritimus*), or monkey flowers (*Mimulus* spp.). Appropriate herbaceous plants include California poppies (*Eschscholzia* spp.), miners' lettuce, evening primrose, yellow pansy (*Viola pendunculata*), California wild fuchsia (*Epilobium californicum*), giant alum root (*Heuchera maxima*), Siberian and Japanese iris, and New England aster. The cast-iron plant (*Aspidistra elatior*) works well in this microclimate, even in deep shade and is available in a variegated leaf form. *Sunset Western Gardening Book* also recommends wood fern (*Dryopteria arguta*) and *Astilbe arendensii* 'Avalanche'.

MOIST SOIL IN SUN: Water gardens provide the best conditions for plants requiring wet feet to thrive. If you don't have a pond but have an area of the garden that seems to stay moist, try spiderwort (*Tradescantia virginiana*), cardinal flower (*Lobelia cardinalis*), cardinal monkeyflower (*Mimulus cardinalis*), ribbon grass, horsetail (*Equisteum hyemale*)-in a confined area, and hostas. Lighter leafed hostas prefer shade.

MOIST SOIL IN SHADE: This is the favorite climate for ferns, broad-leaved bergenia, varieties of dogwood, azalea, and Japanese maple trees. You can combine different leaf textures of elephant's ear (Alocasis sp.), maidenhair fern, tree fern, common callas (*Zantedeschia aethiopica*), caladium and hosta. *Sarcococca* is good in deep shade along with ligularia.

While you may have some of the above microclimates in your yard, you may also want to create new ones for plants that you have always wanted to include in your garden. Here are some tips for creating new microclimates in your garden:

- Trees can be introduced to create windbreaks or shade.
- Deciduous trees lose their leaves in the fall, providing winter sun for early spring bulbs to bloom.
- Extend your growing zone by planting a frost-tender plant on the south side of a wall. The wall will reflect and retain heat to help keep the plant from freezing in the winter.
- Deep mulching around frost-tender plants can help add protection through cold weather.
- Build a rock garden for succulents or alpine plants.
- Create a pond for water-loving plants, either in a barrel or in the ground.
- Plant in pots which can be moved from sun to shade or to warmer spots during cold weather.

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