

PLANTS AND
LANDSCAPES FOR
SUMMER-DRY
CLIMATES

of the San Francisco Bay Region



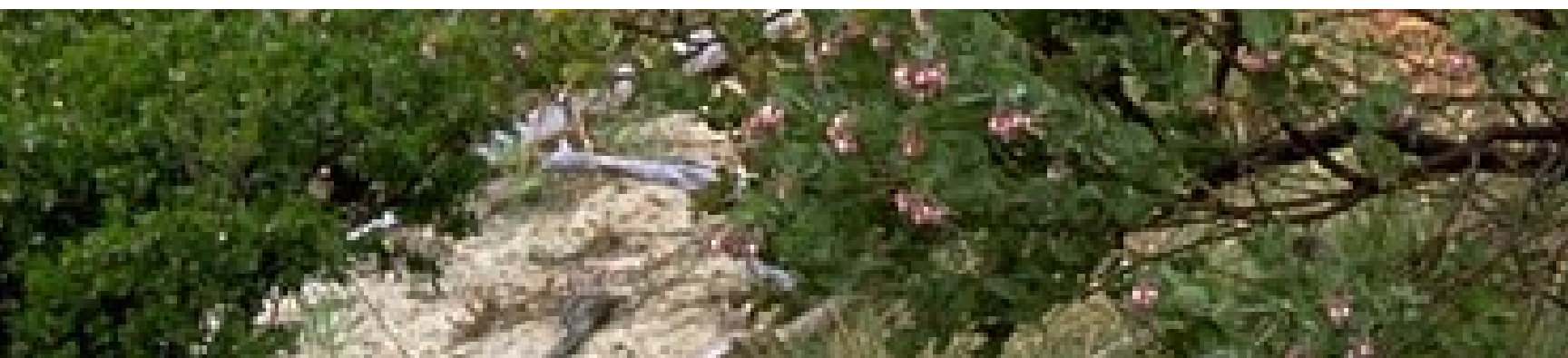
EAST BAY
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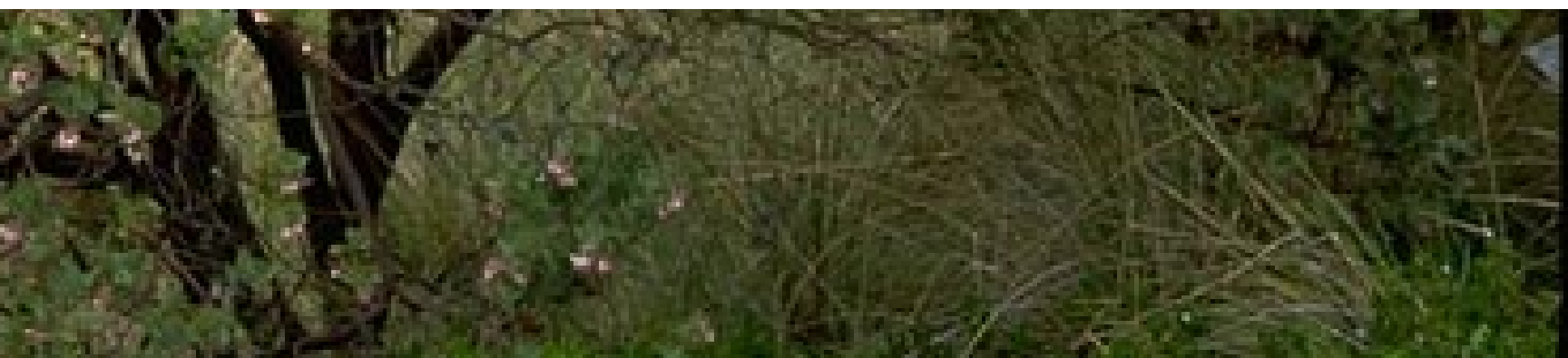


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Chapter One

GARDENING WHERE YOU ARE

Some call it natural gardening. Others describe it as sustainable, ecological, regional, or bioregional. Whatever it's called, the approach to landscaping outlined here is attuned to local climate, microclimate, topography, and soils and responsive to the reality of limited resources. The natural approach to landscape design and maintenance conserves water and energy, protects wildlands, limits green waste, and provides habitat for wildlife. At the same time, it requires less upkeep than traditional landscapes, and it connects the gardener—and those who live, work, or play in the garden—to the rhythms of life: the seasons, the weather, the daily miracles of the natural world.

When we consider what's missing from so many contemporary landscapes, especially in the West, the top of the list has to be what landscape designers and garden writers call the “sense of place”—that elusive quality of landscape design that subtly but unmistakably tells us where we are.

This is the San Francisco Bay Region. It may be Oakland, Palo Alto, or Santa Rosa, Alameda, Walnut Creek, or San Jose. Each of these parts of the larger region has its own soils, topography, and weather patterns, and within each subregion are a multitude of street-by-street or even lot-by-lot variations on the theme.

But it's not Milwaukee, it's not Atlanta, and it's not New York. Like most of California, and much of the West, summers in the Bay Region are warm and dry, and, if we're lucky, winters are wet. Soils may be sandy, rocky, or mostly clay, but, as is true of most low-rainfall regions, they tend to be low in organic matter—they rarely resemble the loamy soils of Midwestern prairies or English garden books.

The region around San Francisco Bay also has a unique physical and cultural geography—a geologic, biologic, and social history that has shaped what we see today. To ignore local history, including our own personal history, is to miss the opportunity to experience and express the authentic character of the place we live. When our gardens and landscapes are informed by our physical, cultural, and personal heritage, they become more than interior decoration taken outside. They feel “right,” and they satisfy a basic human need for meaning.

Many plants are well suited to the Bay Region's climate and soils, and many garden styles can be adapted to express a regional landscape ethic. The English border or cottage garden can be reinterpreted using drought-tolerant native or mediterranean plants and gravel paths. A formal Italian- or French-inspired design might substitute



ARTEMISIA, NEPETA, AND FRENCH LAVENDER CREATE A COOL, LUSH LOOK WITH MINIMAL WATER USAGE.



PLANT ADAPTATIONS TO SUMMER-DRY CLIMATES

Vegetation types in the Bay Region have counterparts in other mediterranean climates, and many plants from these other parts of the world show similar adaptations to seasons and soils. Mediterranean-climate plants typically have characteristics that enable them to defend themselves against summer drought and to thrive in soils that are low in nutrients. These characteristics are displayed in leaves and roots, as well as in life cycles adapted to the short spring growing season and long, dry summers.

Leaves

Many mediterranean plants, such as evergreen oaks and silktassel (*Garrya elliptica*), have thick, leathery, “sclerophyll” leaves that resist dehydration. The leaves of some sclerophyllous plants, such as some California lilacs, have a shiny, waxy coating that reflects heat and light and protects against water loss. The stomata, or small pores, through which leaves exchange gases and release water vapor to the air may be fewer or have smaller openings than those of plants from wetter regions, or they may be protected by tiny hairs or positioned in ways that reduce exposure to hot sun.

The leaves of some drought-resistant plants are held upright or may alter their

ABOVE: *QUERCUS AGRIFOLIA*;

OPPOSITE: DROUGHT-RESISTANT LEAVES (TOP TO BOTTOM AND LEFT TO RIGHT) OF *DRYOPTERIS*

ARGUTA; *CEANOTHUS IMPRESSUS*; *SALVIA LEUCOPHYLLA*; *JUNIPERUS CONFERTA* ‘BLUE PACIFIC’; *YUCCA CARNEROSANA*; *ACANTHUS MOLLIS*; *PINUS ATTENUATA*; AND *AGAVE PARRYI HUACHUCENSIS*

orientation in ways that minimize exposure to sunlight. Grayish green or whitish leaves and leaves with hairy surfaces reflect sunlight or diminish its effects. The leaves of some manzanitas are held edgewise or vertically or have a whitish bloom that helps deflect the full impact of the sun's heat. Chamise has narrow, needlelike leaves that minimize surface area exposed to the sun. The dense canopies of many chaparral plants shade the roots and cool the soil around them.



Some mediterranean-climate plants are drought-deciduous, dropping leaves under drought stress and growing new ones when water becomes available. California sagebrush is a drought-deciduous plant.



Other plants, such as purple sage (*Salvia leucophylla*), survive periods of dryness by producing different kinds of leaves in different seasons, the lush and larger spring leaves dropping off and being replaced with smaller, more drought-resistant leaves in mid- to late summer.

Coast live oak sometimes bears two kinds of leaves, one adapted to sun and the other to shade. Sun-exposed leaves are small, thick, and convex; leaves in shade are flat, thin, and broad, exposing them to more light where light is less intense.



Roots

Some mediterranean-climate plants, such as coast live oak, may have both a deep taproot and a widely spreading surface root system. The taproot draws on longer-lasting sources of water deeper in the soil, while the mass of surface roots picks up transient moisture from light rains or fog drip that evaporates before it can sink into the soil.



Many plants benefit from a symbiotic relationship with mycorrhizal fungi, beneficial organisms that grow on roots and spread widely in the soil, taking up and storing nutrients leached from leaf litter during rains. The fungus releases stored nutrients slowly to plant roots, providing nourishment during dry periods when the supply from surrounding soil has diminished. Oaks, pines, and eucalypts are examples of plants that benefit from symbiotic micorrhizal associations.

THE SEASONS OF CALIFORNIA

Immigrants to California often say that they miss the seasons, those familiar changes that define the natural year. It's true; the four-season model of Winter, Spring, Summer, and Fall doesn't fit here, but California has its own rhythms and seasons, both dramatic and subtle.

At first it may seem that there are just two seasons in California, the rainy season and the dry, but there is another. As the weather warms and the rains taper off from mid-February to mid-June, we have four glorious months when the still-moist land explodes with color and life. The third season is Wildflower season, and wildflowers make California a place like no other on earth.

Each of California's three seasons—the rainy season, the wildflower season, and the dry season—is about four months long, and each has markers for its start and finish.

The Rainy Season

There is no calendar date for the start of the rainy season, but its onset each year is clear. The first big rain, usually in October, is when the thirsty land drinks again, becoming moist and fragrant and soon green. For California, it is New Year's Day and the first day of spring wrapped up together.

The first seedlings appear within a week of the rains, and so do the newts. The bulbs and roots come up—soap root, lace plant, buttercups, mushrooms. In December, trees and shrubs join the parade, first the pink and white bells of manzanita and then the chartreuse flowers of California bay.

The rainy season brackets the winter solstice with four months of cool, wet weather, shorter days, and slanting light. Between storms there are clear days, days of

fog, frosts, and the best sunsets. By New Year's the catkins of alder and hazelnut appear, as do the shoots of elderberry and the first pussy willows. Later in January the currants bud and bloom. By the first of February the hills are green, and the long spring that spans two seasons is half over. Buckeyes leaf out in the rain, heralding the onset of the next season.

Wildflower Season

Wildflower season unfolds in three phases: the early, wet phase; the balmy, showy phase; and the drying

NORTHERN CALIFORNIA
HILLS TURN GREEN WITH
WINTER RAIN.



dropping cleanly. Dies back to ground in winter. Self-sows and spreads underground, sometimes aggressively; best in confined planting areas. Full sun to part shade, good drainage, moderate to occasional water. Attractive to butterflies and bees. Native to southern U.S. and Mexico. 'Siskiyou Pink', 2-3' x 2-3', has green leaves mottled with maroon and dark pink flowers. 'Whirling Butterflies', 2-3' x 2-3', has pure white flowers from pink buds.

Gazania (gazania)



GAZANIA HYBRID

ZONES 8-24. PERENNIALS. SIZE VARIES.

Short-lived clumping or trailing perennials with green or gray-green leaves and daisylike flowers. Full sun, moderate to occasional water. Good seaside plants. Native to South Africa. Usually offered as named cultivars.

Clumping forms, 6-12" x 6-12", have dark green, usually lobed leaves with gray-woolly undersides and large flowers in yellow, orange, white, or rose-pink, sometimes multi-colored, often with darker centers. Trailing gazanias, 6-12" x 2-3', have silvery gray-green leaves and yellow, white, orange, or bronzy flowers. Clumpers are best as accents

and fillers; tend not to fill in large areas. Trailing kinds are effective on banks or spilling over a wall.



Gilia (gilia)



GILIA TRICOLOR

ZONES 1-24. ANNUALS. SIZE VARIES.

Delicate-looking plants with finely divided, feathery leaves and colorful flowers in spring and summer. Full sun, good drainage, occasional water. Native to western North America, including California.

G. achilleifolia, blue gilia, 18-30" x 8-18", bushy plant with small clusters of deep blue to blue-violet flowers.

G. capitata, blue thimble flower, 8-30" x 8-12", has pale blue to blue-violet flowers in small, dense clusters resembling pincushions.

G. tricolor, bird's eyes, 12-18" x 8-12", has small, blue-violet flowers with striking pale blue pollen.



Ginkgo biloba (maidenhair tree)



ZONES 1-10, 12, 14-24. DECIDUOUS TREE. 50-80' x 25-50'.



Slow-growing, graceful tree noted for its brilliant yellow fall color, particularly stunning when leaves are left to carpet the ground like golden snow. Full sun, reasonable drainage, moderate water. Tolerates heat and drought. Native to China. 'Autumn Gold' is narrowly symmetrical when young, eventually spreading. 'Fairmount' is pyramidal. 'Saratoga' is upright, with a strong central leader. 'Jade Butterflies' is a smaller tree with particularly large, deeply lobed leaves and lacks the awkward juvenile character of the full-size ginkgo selections.

GINKGO BILOBA



PLANT NAME	CA Native	BLOOM TIME		EXPOSURE		
		Winter/ Spring	Summer/ Fall	Sun	PM Shade	Shade
<i>Rosa</i>	•	•	•	•		
<i>Rosmarinus</i>		•		•		
<i>Rubus</i>	•	•	•	•	•	•
<i>Salvia</i>	•		•	•		
<i>Sambucus</i>	•	•	•	•	•	
<i>Santolina</i>			•	•		
<i>Sarcococca</i>		•			•	•
<i>Senna</i>		•	•	•		
<i>Solanum</i>	•	•	•	•	•	
<i>Styrax</i>	•	•		•	•	•
<i>Symphoricarpos</i>	•	•	•	•	•	
<i>Tibouchina</i>		•	•	•	•	
<i>Trichostema</i>	•	•	•	•		
<i>Vitex</i>			•	•	•	
<i>Westringia</i>		•	•	•		
<i>Xylosma</i>				•	•	

GRASSES

PLANT NAME	CA Native	BLOOM TIME		EXPOSURE		
		Winter/ Spring	Summer/ Fall	Sun	PM Shade	Shade
<i>Andropogon</i>			•	•		
<i>Aristida</i>	•		•	•		
<i>Bouteloua</i>	•		•	•		
<i>Calamagrostis</i>	•		•	•	•	
<i>Deschampsia</i>	•		•		•	
<i>Elymus</i>	•		•	•	•	
<i>Festuca</i>	•	•	•	•	•	
<i>Helictotrichon</i>		•	•	•		



ATTRACTING BIRDS AND BUTTERFLIES

The following are some plants that may bring butterflies and birds to your garden. Host plants for butterfly larvae provide food for caterpillars, but they often are not the same plants as those on which adult butterflies feed. Hummingbirds may check out many flowering plants for potential nectar, but will reliably return to their favorites. Birds of many kinds are attracted to plants for nesting and cover as well as food.



PLANT TYPE BIRDS HUMMINGBIRDS BUTTERFLIES BUTTERFLY LARVAE



Trees

<i>Acacia</i>	•	•		
<i>Aesculus</i>	•		•	•
<i>Albizia</i>	•	•		
<i>Arbutus</i>	•			
<i>Celtis</i>	•			
<i>Cercis</i>		•		
<i>Chilopsis</i>	•	•		
<i>Crataegus</i>	•			•
<i>Eriobotrya</i>	•			
<i>Eucalyptus</i>		•		
<i>Melaleuca</i>		•		
<i>Pinus</i>	•			•
<i>Platanus</i>				•
<i>Prunus</i>				•
<i>Quercus</i>	•			•
<i>Schinus</i>	•			



Shrubs

<i>Abelia</i>		•	•	
<i>Arbutus</i>	•	•		
<i>Arctostaphylos</i>	•	•	•	
<i>Atriplex</i>	•			
<i>Banksia</i>	•	•		
<i>Berberis</i>	•			
<i>Buddleja</i>		•	•	
<i>Callistemon</i>	•	•		
<i>Caryopteris</i>			•	
<i>Ceanothus</i>	•	•	•	•
<i>Chaenomeles</i>	•	•		
<i>Choisya</i>			•	
<i>Correa</i>		•	•	
<i>Cotoneaster</i>	•			
<i>Echinacea</i>		•	•	
<i>Elaeagnus</i>	•			



TOP TO BOTTOM, LEFT TO RIGHT; *ACACIA CULTRIFORMIS*; *AESCULUS CALIFORNICA*; *ALBIZIA JULIBRISSIN*; *ARCTOSTAPHYLOS DENSIFLORA* 'HOWARD McMINN'; *BANKSIA ERICIFOLIA*; *CALLISTEMON VIMINALIS* 'LITTLE JOHN'; *CARYOPTERIS CLANDONENSIS* 'DARK KNIGHT'; *CEANOTHUS* 'JULIA PHELPS'; *CORREA PULCHELLA*; *CRATAEGUS PHAENOPYRUM*

