



A view over the sages growing in the coastal sage scrub community. Mature trees of western sycamore (*Platanus racemosa*) and Fremont cottonwood (*Populus fremontii*) frame the northern end of the Garden. All photographs by D. Songster.

GOLDEN WEST COLLEGE NATIVE GARDEN: A LEARNING EXPERIENCE

by Dan Songster

The oak leaves crunch beneath your feet, bushtits dash and thrash among the branches of the Nevin barberry, a student stoops to identify a monkey-flower, hummingbirds sip quickly from the fragrant sage and glowing foothill penstemon flowers, and the scarlet blooms of island snapdragon hang like jewels from the lower branches of the bishop pine it has entwined.

The California Native Garden at Golden West College is a small affair tucked between our math/science building and a nearby parking lot on the west side of the campus. Less than an acre and a half, it is surrounded on three sides with an eight-foot tall berm creating some inter-

esting slopes for planting, while providing a sense of isolation from the busy campus. Almost anytime of year you can sit within its boundaries and enjoy the antics of birds foraging, fighting, and frolicking among the plants in a manner unlike the rest of campus. Students, faculty, and staff visit daily during breaks. They enjoy the Garden's warmth, breathe in the sages, stroll the pathways, or chat among themselves much like the birds. I have witnessed a lot of thoughtful expressions in the Garden but have seldom seen a visitor wear a frown, at least for long.

Of course the Garden's original purpose was not for such wholesome and pleasurable interludes from a day's studies. The intention

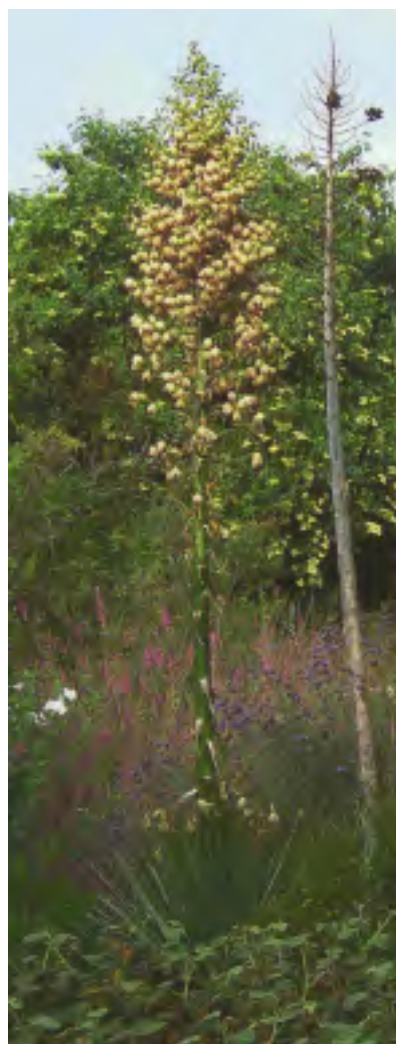
in 1975 was to have a native garden serving as an outdoor classroom and lab for the science department's biology, botany, and environmental studies classes. Back in the 1970s, this idea was cutting edge. People were not acquainted with California natives and I was no exception. So began a long study effort with equal parts of the old *A California Flora* by Philip Munz, and visits to many native gardens, nurseries, plant experts, and other native resources throughout the state. As the Garden progressed in the mid 1980s, Rod Wallbank became involved with the Garden and we began sharing duties as Co-Directors. Being assigned the task of designing and eventually installing the Golden West College

Native Garden has introduced us to many interesting and inspirational plants and people over the last 30 years. I wonder if today's new crop of native plant enthusiasts can imagine the difficulty we had finding reliable information about natives or how rare it was to see a native in a landscape back then. But I digress.

GARDEN OVERVIEW

The Garden currently allows college students, faculty, staff, and anyone with an interest in native plants, to observe and learn about over two hundred species of native trees, shrubs, and perennials of various ages, and at least another fifty species of vines, bulbs, and annuals. Since the Garden's mission is anchored in studying these native plants, it was an easy choice to design the Garden in a series of coherent plant communities much like Rancho Santa Ana Botanic Garden's rear acreage. These plant groupings are found naturally throughout California and are an effective way to study our state's botany. Of course, the Garden cannot approach the diversity found in California's wild plant communities, but we are satisfied if we can present a representative variety of plants from a community, deliberately arranged in what could be considered a natural manner.

The communities we have installed include Foothill Woodland, Redwood Forest, Oak Woodland, Chaparral, Coastal Sage Scrub, and Mixed Evergreen Forest. We also have a section for some of the intriguing plants from the Channel Islands. A grassland is planned beneath a somewhat vacant portion of the Oak Woodland, and a small ornamental meadow, with an emphasis on our lovely native bulbs, is intended for the area near the glasshouse. Though we have no moving water, a nod to riparian systems was attempted by including riparian species along the edges of various com-



CLOCKWISE FROM TOP: A hummingbird favorite, fuchsia-flowering gooseberry (*Ribes speciosum*), grows with Munz sage (*Salvia munzii*). Both provide late winter color. • A white sage (*Salvia apiana*) in full bloom glows in the morning light. Elegant clarkia (*Clarkia unguiculata*) and lemonadeberry (*Rhus integrifolia*) are in the background. • Chaparral yucca (*Hesperoyucca whipplei*) provides a stunning flowering accent between Cleveland sage (*Salvia clevelandii*) and bushrue (*Cneoridium dumosum*). Last year's dead flower stalk is now a perch.

munities (willow, alder, poplar, etc). We also have several pockets for spring wildflowers to catch the visitor's eye. Certainly they attract a lot of attention and perhaps people



ABOVE: Early summer bloom of Matilija poppy (*Romneya coulteri*) with elegant clarkia (*Clarkia unguiculata*) peeking through from slightly uphill. • RIGHT: The Baja, or small-leaved, rose (*Rosa minutifolia*) is endangered in California but survives the Garden's clay soil.

attracted by their vibrant colors will return to enjoy different aspects of the Garden in other months. Throughout the Garden, we have included plants with flowers, berries, and fruits that are attractive to several kinds of fascinating creatures. The variety of birds and butterflies are of great interest to our students and other Garden visitors.

Pathways wind through the Garden, helping tie the various communities together while allowing visitors a close-up view of the plants. Stone benches have been placed along the paths and in the evening simple bollard lighting makes the garden feel friendly and inviting. In the northwest corner there is a small glasshouse, lath house, and potting shed where the botany and biology classes grow plants for their needs. We also use these facilities to propagate natives for planting in the Gar-



den, gifts to friends, and occasional plant sales. Built into the berm in the north end of the garden is our lovely stone amphitheater, and on the south end, perched among the coastal sage, is a plateau with seating for study groups and the evening astronomy class.

COMMUNITIES

Despite the Garden's small size, we have tried to include enough indicator species and species of interest from each plant community to give our visitors the flavor of that particular community. Let's take a quick walk through some of the Garden.

The Channel Island section, at

the northern entrance to the Garden, is dominated by three trees, a bishop pine (*Pinus muricata*), cloaked with dark green needles, that is finally happy after a very slow first 12 years. Nearby is the hybrid island mountain mahogany (*Cercocarpus betuloides* var. *blancheae* x *C. traskiae*) with tall, sculpted trunks soaring twenty feet, topped with a light canopy of dark olive-green leaves. The arboreal triangle is completed by a multi-trunked, fern-leaved Catalina ironwood (*Lyonothamnus floribundus* spp. *asplenifolius*) with its shredded, cinnamon-colored bark and its large umbels of creamy flowers perched high on the branches. Catalina cherry (*Prunus ilicifolia* ssp. *lyonii*), island bush poppy (*Dendromecon harfordii*), Catalina Island snowflake (*Eriophyllum nevinii*), and Santa Cruz Island gooseberry (*Ribes thacherianum*) are also thriving here.

The Coastal Sage Scrub section is striking with coast sunflower (*Encelia californica*), bladderpod (*Isomeris arborea*), several California buckwheats (*Eriogonum* spp.), and the drama of chaparral yucca (*Hesperoyucca whipplei*). Other dependable plants include coyotebrush (*Baccharis pilularis* var. *consanguinea*), lemonade berry (*Rhus integrifolia*), and the pungent California sagebrush (*Artemisia californica*). Of course, with many sages (*Salvia* spp.), the area is deliciously fragrant.

Our Foothill Woodland section holds two of the oldest plants in the garden, planted in 1975, a coast live oak (*Quercus agrifolia*) and a western redbud (*Cercis occidentalis*). Nearby, a valley oak (*Quercus lobata*) emerges from a rambling mass of basketbush (*Rhus trilobata*), spilling down a small hillside. In spring, among the nodding needlegrass (*Nassella cernua*), we enjoy bulbs like the single-leaf onion (*Allium unifolium*), Ithuriel's spear (*Triteleia laxa*), and various mariposa lilies (*Calochortus* spp.).

Chaparral is very difficult to rep-

licate in any garden, but with our heavy soils it is more than a design challenge. Obviously, it would be easier if we had better-draining soils for some of our favorites, such as manzanitas, woolly blue curls, and flannelbush. We still try to grow them with varying degrees of success: flannelbush (*Fremontodendron* spp.) lasts longest for us, averaging about six years; manzanita (*Arctostaphylos* spp.) four to six years; and sadly, we often treat woolly blue curls (*Trichostema lanatum*) as a biennial. We add to these somewhat transient residents more long-lasting species such as laurel sumac (*Malosma laurina*), sugarbush (*Rhus ovata*), mountain mahogany (*Cercocarpus betuloides*), Tecate cypress (*Cupressus forbesii*), toyon (*Heteromeles arbutifolia*), scrub oak (*Quercus berberidifolia*), California coffeeberry (*Rhamnus californica*), and numerous California lilacs (*Ceanothus* spp.).

The Mixed Evergreen Forest section carries the sharp scent of the California bay (*Umbellularia californica*), the stunning spring floral display of the pink flowering currant (*Ribes sanguineum* var. *glutinosum*), and includes the astounding green of the incense cedar (*Calocedrus decurrens*). Next to one of our madrones (*Arbutus menziesii*), a white-flowered form of California lilac (*Ceanothus thyrsiflorus* 'Snow Flurry') stands over twenty feet tall and almost as wide, casting dappled shade beneath for the appreciative coral bells (*Heuchera* spp.), meadow rue (*Thalictrum fendleri* var. *polycarpum*), Douglas iris (*Iris douglasiana*), and California polypody fern (*Polypodium californicum*).

Our Oak Woodland consists of coast live oak (*Quercus agrifolia*), a juvenile interior live oak (*Quercus wislizeni*) just starting to assert its size and shape, and the gracefully eccentric Englemann oaks (*Quercus engelmannii*) staggered on each side of the walkway. Several of these oaks are tall enough to plant under now,



A western red cedar (*Thuja plicata*) provides excellent color contrast standing in front of a group of coast redwoods (*Sequoia sempervirens*).

and deer grass (*Muhlenbergia rigens*), hummingbird sage (*Salvia spathacea*), and blue-eyed grass (*Sisyrinchium bellum*) are starting to spread beneath these trees.

GARDEN CARE AND CONCERNS

As in any garden, maintenance is a year-round activity. Our year begins with fall planting, pruning mainly during the winter months, and weeding all winter and spring. Summer months involve mulching, specific watering, and hardscape projects.

The most time-consuming and least enjoyed chore for our understaffed Garden is weeding. We try to avoid herbicide use, and that means hand weeding where mulch has worn thin or in communities in which we don't use mulch. It's pretty easy getting together a large number of friends for our annual planting day, but it takes a bit of arm-twisting just to get a small group for weeding.

Pruning is also an important part of this garden's maintenance. As in many gardens created by plant lovers, space becomes an issue. Sometimes plants grow larger than expected or are simply spaced too closely together by an optimistic gar-



ABOVE: Spring blooms of lilac verbena (*Verbena lilacina*) and coral bells (*Heuchera* sp.) in the morning sun. • LEFT: Catalina Island snowflake (*Eriophyllum nevini*) provides a lovely accent near the amphitheater.

dener who should have known better. When plantings become too crowded, pruning becomes more

than a means to enhance the structure and beauty of the plants involved. It is also a way to keep some of the shrubs and trees from directly interfering with each other's growth, allow more air movement to combat potential disease, create planting space beneath large shrubs or small trees, and allow light to penetrate to understory plants beneath larger trees. Being crowded also means it is essential we remove the fast growing seedlings of large shrubs and trees such as elderberry, lemonade berry, oak, and coyote brush or the garden will be choked! There is little room for just letting the Garden be, although that is how it looks to most visitors who say they like our "natural garden."

As noted earlier, our Garden has

clay soil that is a challenge for growing many of the natives whose descriptions in any publication invariably read "need good drainage." We do have many gentle slopes that help with drainage and we do make clever attempts to improve drainage, but these heavy soils have led to the demise of some of our favorite plants. Possibly the only good thing about growing our native plants in clay soils is that we have learned a few things about gardening in such conditions over the last 30 years. Since people who live in Orange County generally garden in some form of clay (try as they might to alter it), we understand their plight, temptations, and most of all, we have hard-won advice to give. Sometimes we simply offer a shoulder to cry on.



TOP: Point Sal purple sage (*Salvia leucophylla* 'Point Sal') adds a pastel touch to a section near the coastal sage scrub community. Shaw's agave (*Agave shawii*) and California sunflower (*Encelia californica*) are in background. • BOTTOM: A winter view in the mixed evergreen forest section with the graceful Claremont flowering currant (*Ribes sanguineum* var. *glutinosum* 'Claremont') in full bloom.

Using as little water as we can and retaining rainwater on-site has been important to us from the beginning. With the exception of the redwood and mixed evergreen forest areas, the plants don't normally need or appreciate much more than winter rainfall. (We will be introducing a low-volume irrigation system for the redwood and mixed evergreen forests.) Very dry winters mean we have to turn on the water for a healthy, presentable garden. We try to do this during cool, cloudy winter days to avoid the chance of root rot or other fungal activity harming the plants. Since we have no sophisticated irrigation systems, we simply set out impact heads to water the garden, moving the sprinklers to prevent runoff and allowing water to soak in. It works.

ENJOY

The Golden West College Native Garden may be small, but it is packed with plants. Although it contains several of California's rare and endangered species, many drought-loving natives, and dozens of plants attractive to both bird and butterflies (and more), the Garden is not a pure botanic garden, nor is it a water district showpiece or a butterfly garden. It is a garden whose mission is the same as ever, to provide a learning experience for its visitors. Whether you are a student studying for the upcoming quiz, a local resident thinking about replacing the front lawn with a water-saving landscape, a conservationist, or bird lover preparing for some backyard restoration with local natives, the Garden has something for you. It is a learning experience.

Golden West College Native Garden,
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