



Carol Bornstein is director of the Nature Gardens at the Natural History Museum of Los Angeles County. She has spent more than 37 years promoting the beauty and versatility of California's native plants and encouraging their greater use in the landscape.

***Clarkia unguiculata*  
(below, left)**

Elegant clarkia blooms from late spring to early summer, bearing petals ranging from deep magenta to pure white on plants that grow to about 3 feet tall and 4 to 8 inches wide. The annual plant provides support for white-lined sphinx moths, which lay their eggs on the leaves. The flowers hold up well in arrangements.

***Aristida purpurea*  
(below, right)**

Bornstein says this colorful, sun-loving California native is an excellent alternative to invasive *Nassella* syn. *Stipa tenuissima*. "The eggplant purple flowers age to blond and the 2-foot-tall stalks capture the slightest breeze. It can seed about, so beware!" Bornstein recommends removing the flower stalks before the seeds ripen to prevent too much spreading. Purple three awn grows to 2 feet wide. Zones 6–9

**GROUNDBREAKER**

# GOLDEN STATE PLANT WARRIOR

A California native plant expert shares advice for designing gardens with regionally appropriate plants—wherever you live.

BY THERESE CIESINSKI | PHOTOGRAPHY BY JOSH ENDRES

**A SURPRISING HAVEN RESIDES IN** the most populous county in the U.S. In the heart of LA County, birds flock to a stream that meanders through 3.5 acres of plants; native sunflowers lure bees to a bright pollinator meadow; and lizards, spiders, and snails make their homes near a spiky stone wall—all within the Nature Gardens at the Natural History Museum of Los Angeles County, specifically built to provide habitat for wildlife in an urban setting.

For Carol Bornstein, director of the Nature Gardens (nhm.org), creating a place for visitors to experience a thriving diversity of wildlife and native and Mediterranean climate-appropriate plants is a first step to teaching them how to design and care for gardens in harmony with nature—a cause she has championed for more than 37 years.

Bornstein herself is not a native of the state. Like many Californians, she is a transplant from elsewhere. After growing up in Michigan and getting a

bachelor's degree in botany from the University of Michigan and a master's degree in horticulture from Michigan State University, she headed west to her first job, as a plant propagator at the Santa Barbara Botanic Garden (SBBG). That garden features only California native plants and is where Bornstein learned to love them. She stayed 28 years, holding lots of different posts, including director of horticulture.

One of her responsibilities was finding promising plants in the wild and trialing and then introducing the best into cultivation. Fragrant, purple-flowered *Verbena lilacina* 'De La Mina' is one of her best-known introductions—it can be found in big-box stores and retail plant nurseries throughout the U.S. Other introductions include salvias, ceanothus, and manzanitas.

Bornstein is also a writer, garden designer, and educator. She is the co-author, with David Fross and Bart O'Brien, of the books *California Native Plants for the Garden* (Cachuma Press, 2005)—which received a 2006 Book Award from the American Horticultural Society—and *Reimagining the California Lawn* (Cachuma Press, 2011).

"She is absolutely one of the best horticultural minds that I know of," says Randy Baldwin, president of San Marcos Growers, a wholesale nursery in Santa Barbara. "For those interested in California flora and in growing native plants, Carol is one of the most respected and knowledgeable people in the field, and is generous in sharing her knowledge."







**Left:** The living wall at the Nature Gardens is planted with many types of succulents. Two, known as liveforevers, are *Dudleya brittonii* (center) and *D. virens* ssp. *hassei* (left and right). “They are happiest when grown in gravelly or sandy soils and allowed to dry out during summer—otherwise they’re susceptible to rot,” Bornstein says. Hummingbirds visit the flowers, and caterpillars of some butterflies eat the leaves.

It depends on where the plant is from, where it naturally occurs in the wild. If it’s from an area with lots of moisture, it will need more water. Other native plants, and those that have adapted more to the Mediterranean climate cycle, need water too—just less once established.

**What attributes in a native plant should people look for to attract wildlife?**

Does it provide habitat—food, or water, or shelter? For example, oak trees support hundreds of species of wildlife that in some point in their life cycle will take shelter and food from them.

**What do you wish people would ask about plants that they don’t?**

What will grow well in the soils I have on my property? The mantra used to be: In

order to grow healthy plants we need to amend the soil and increase its organic content. Many California native species don’t do well in such rich soil. I encourage people to work with the soil they have, unless it has toxic levels of metals, pesticide residue, or the like. We want our soils to be biologically dynamic and full of beneficial microorganisms that will support plants we wish to grow.

**If you could get every gardener in LA County to do one thing, what would it be?**

Plant more *regionally appropriate* native plants. People plant coast redwoods in Southern California, but they don’t belong in people’s gardens here—the climate isn’t right. This state is so big and so diverse, you can’t assume that all California native plants are appropriate all over the state.

**Below: *Oenothera californica***

The lightly fragrant white flowers of this spring and summer bloomer open in the evening; hence the common name California evening primrose. The flowers are pollinated by moths attracted to the blossoms and turn to pink as they age. This plant wanders freely without becoming weedy, reaching about 6 inches tall. Zones 6–10

**GD: What is it that interests you about native plants?**

**BORNSTEIN:** It’s about loving the one you’re with. There are more than 5,000 species native to the state—so many cool plants with different things to offer, the result of millions of years of evolution. These plants are ecologically fit for the area. They support wildlife and vice versa. Respecting where you garden and staying in harmony with nature seems like the right approach to me.

**How do you determine if a plant is a candidate for propagating?**

What usually catches my eye is, is it pretty? It has to be appealing. Can you propagate it easily? How easy is it to cultivate? Does it have broad adaptability to gardens? One thing I look for is the unusual: for example, if a plant usually has blue flowers but this one has white ones.

**Have you noticed a change in peoples’ attitudes toward native plants over the years?**

There’s definitely more interest, but it waxes and wanes with the drought cycle. In California, people become more interested in natives and other Mediterranean-climate plants when we’re in a prolonged winter drought cycle. People think, “We can plant natives—they don’t need water,” which is wrong.

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**Left:** Atop the Nature Garden’s living wall are an array of species that thrive in hot, dry sites. *Agave americana* is at upper left, fronted by red-flowered *Calliandra californica* and *Agave* ‘Sharkskin’. *Fallugia paradoxa*, a white-flowered shrub that forms striking plumed seed heads, is at upper right. *Dalea greggii*, an evergreen groundcover with tiny purple flowers, cascades over the top of the wall, while a yellow hybrid *Encelia* blooms at lower left.

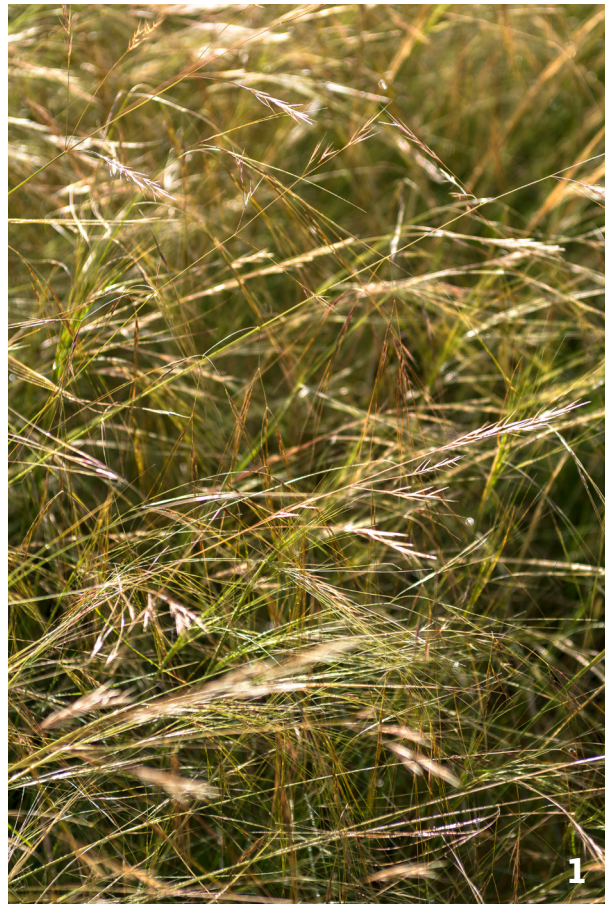


**1 *Stipa cernua* syn. *Nassella cernua*** When in bloom, the feathery flowers of nodding needlegrass can reach 3 feet tall. This bunchgrass mixes well with wildflowers and other bunchgrasses where it can go dormant in summer. Now that it's been established in the Nature Gardens, it doesn't need any irrigation, even in summer. Zones 7–10

**2 *Elymus condensatus* 'Canyon Prince'** This popular bunchgrass, introduced by the SBBG, was selected from plants collected on California's Channel Islands. Its flower stalks are the same glaucous blue as its foliage, and it holds its color best when planted in full sun. 'Canyon Prince' grows 3 feet tall, with the flower stalks adding several more feet in height. Plants spread slowly by rhizomes. This grass is tolerant of dry summer conditions once established but does accept occasional water. Zones 7–11

**3 *Salvia leucophylla* 'Figueroa'** This selection of purple sage with silvery foliage grows to 4 feet tall and blooms in spring. Hummingbirds and bees visit its flowers and quail eat its seeds, but deer avoid its aromatic evergreen foliage. Bornstein says that birds perch on its dried flower stalks. It's tolerant of dry summer conditions once established, but it does well with occasional irrigation. Dried stalks of native *Stipa cernua* are in the foreground. Zones 8–11

**4 *Abutilon palmeri*** This tough, dry-loving desert species has soft, silvery green foliage. "Site this desert dweller next to a path where you can stroke its velvety leaves and get a close-up view of bees pollinating the apricot-colored cup-shaped flowers," Bornstein says. Indian mallow grows to 8 feet tall and 5 feet wide and blooms year-round. Zones 9–11



1



2



3



4

The Nature Gardens' naturalistic pond is vegetated entirely with California native plants both in and around the water. It harbors birds, dragonflies, damselflies, and the locally native Arroyo chub, a fish introduced to the Nature Gardens. A Western sycamore is in the background; yellow-blooming *Mimulus guttatus* is above the waterfall. In the water are *Nuphar polysepala* and *Typha* species cattails.

#### How do people find information about natives appropriate to their area?

Visit your local botanic garden and local native plant nurseries. Go on garden tours. Talk to neighbors. The Xerces Society ([xerces.org](http://xerces.org)) and the California Native Plant Society ([cnps.org](http://cnps.org)) have good information on attracting pollinators.

#### How is the garden irrigated?

We have a computer-run system that receives data from local weather stations. In response to information we enter about each plant, the system programs the amount of water each area needs. Although that amount adjusts depending on the weather, we can override it if we need to.

#### How are plants cared for there?

We use organic practices. We are not certified, because we don't sell plants. But we use only electric power tools—not gas powered because of the air pollution they cause and the fossil fuels they use. And we use natural methods to deal with pests. For example, not too long after we built this garden, uninvited creatures showed up—insect pests. Before treating any plants, even organically, we said let's just wait and see whether the pests' natural predators show up and provide ecological balance. We could spray aphids off a plant with a jet of water, sure, but we'd rather see whether ladybugs or lacewings show up and take care of them.





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#### 1 *Heuchera* ‘Wendy’

Bornstein particularly likes this spring- and summer-blooming evergreen perennial for its profuse display of little pink flowers that are beloved by hummingbirds and bees. This variety of coral bells prefers a lightly shaded location with good drainage. The basal rosette of leaves is 8 to 12 inches tall, and the flower stalks add another 3 feet or so to its height. This plant needs occasional to moderate irrigation. Zones 8–10

#### 2 *Ceanothus* ‘Concha’

‘Concha’ is one of the most popular medium-size wild lilac cultivars, reaching 6 to 8 feet tall and wide. “In early spring the rose-colored buds open to vivid blue on long, arching branches,” Bornstein says. Bees love it, and it’s a larval food plant and nectar source for many types of butterflies. It’s tolerant of dry summer conditions once it’s established, but it does accept occasional irrigation. Zones 7–10

#### 3 *Eriogonum grande*

**var. *rubescens*** Red-flowered buckwheat is among Bornstein’s favorite buckwheats. Like *Eriogonum giganteum*, this species is pollinated by many insects, and mammals and birds eat its seeds. “This is a fantastic species for the front of a mixed border or tucked among rocks,” Bornstein says. If it’s happy it will reseed throughout the garden. This buckwheat forms mounds that grow up to 2 feet tall and about 2 feet wide, producing light to dark pink flowers from late spring into summer. Zones 8b–10

#### 4 *Muhlenbergia rigens*

Deer grass is one of the easiest perennial grasses to grow—it even grows in light shade. Its green-gray clumps can reach 5 feet tall in late spring and early summer when it’s in bloom. Bornstein especially likes it then, and appreciates the way it combines well with so many other natives in both naturalistic and formal compositions. Though it tolerates dry conditions, it does best with moderate irrigation. Zones 5–11

#### 5 *Eriogonum giganteum*

This is the largest of more than 125 buckwheat species in California, and one of the most popular. St. Catherine’s lace has big silvery leaves and enormous inflorescences of creamy white flowers that fade to rusty brown in autumn. All sorts of insects pollinate its flowers, and mammals and birds eat its seeds. Bornstein loves it for its combination of bold gray leaves and fine-textured flowers. “It’s stunning in late summer and fall when it turns brown,” Bornstein says, “reminding us that we do indeed have seasons in Southern California!” It needs little water and reaches up to 8 feet tall and 5 or more feet wide. Zones 9–11

#### 6 *Constancea nevinii* syn. *Eriophyllum nevinii* ‘Canyon Silver’

This is a selection of Catalina silverlace that Bornstein made from the living collections at SBBG. “It’s one of my favorite plants for the lacy texture and striking color of its foliage—plus the deep brown color of the dried inflorescences provides such dramatic contrast.” Its golden yellow flowers bloom in early summer and turn to chocolate brown in early fall. Birds eat the seeds, and many kinds of insects feed on its pollen and nectar. ‘Canyon Silver’ barely needs any summer water in coastal gardens. Zones 9–11

#### 7 *Verbena lilacina* ‘De La Mina’

Bornstein collected this plant in the Cañada de la Mina on Cedros Island off the west coast of Baja California, selecting it for its purple color. Its sweetly fragrant flowers bloom from spring through fall, and their nectar attracts butterflies. Bornstein likes to weave this plant into mixed borders with other dry-loving natives or Mediterranean-climate plants. It tolerates dry summer conditions but also accepts occasional irrigation. ‘De La Mina’ grows quickly, eventually becoming a dense mound 3 feet tall and wide. Zones 7–10

#### 8 *Encelia californica*

At the museum gardens California bush sunflower grows along pathways and in gaps at the base of the living wall. It needs little to no summer water once established but will bloom from spring through fall if deadheaded and given supplemental water. It provides food for butterflies, bees, and birds. This semievergreen shrub grows to 4 feet tall and 5 feet wide. Bornstein particularly likes the ‘Paleo Yellow’ cultivar, which is, at 3 feet tall and 4 feet wide, slightly smaller than the straight species. Zones 9–10

#### 9 *Salvia brandegeei* ‘Pacific Blue’

Bornstein selected this volunteer plant from the SBBG. “The bright blue flowers of this cultivar caught my eye because they were so much more vibrant than the pale blue color typical of the straight species,” Bornstein says. “This is a robust plant. It blooms a long time, has low water needs, and is quite durable.” Santa Rosa Island sage blooms in spring—and into summer if given occasional water—on stalks that reach up to 6 feet tall. It spreads to 6 feet wide. Zones 7–9



OPPOSITE: SAXON HOLT (7)