Why Garden with Native Plants?

from the California Native Plant Society

Local native plants complement our natural ecosystem, as they are uniquely adapted to live with our climate, soil conditions, and animals. This gives us several gardening advantages:

Saves Water: Once established, many native plants need little irrigation beyond normal rainfall. Low Maintenance: Native plants require less pruning, fertilizer, water, and less time to maintain. Less Pesticide: Native plants have developed their own defenses against many pests and diseases. Most pesticides kill helpful creatures that control pest populations. Beneficial insects, such as Ladybird beetles (ladybugs), preying mantises, and lacewings prey on pests, such as aphids, scales and spider mites. By eliminating pesticides, pest control occurs naturally, which prevents pesticide-polluted runoff from flowing to waterways.

Gardening with natives creates wildlife habitat. Native plants and animals were "made for each other". Native plants provide the food, shelter, and nesting sites that native birds, butterflies, beneficial insects, and urban-adapted wildlife need. In return, pollinators such as flying insects, birds, and bats improve fruit set and help control mosquitoes. A native garden creates a "bridge" to nearby

wildlands, which helps sustain local ecology.

The California Native Plant Society (CNPS) is a non-profit organization dedicated to the understanding and appreciation of California's native plants and to conserving native plants and their natural habitats through education, science, advocacy, horticulture and land stewardship. http://cnps.org/.

Wild Nours Nersives

Work with Nature when Gardening

from Rancho Santa Ana Botanic Garden

Take cues from nature to create a more beautiful outdoor space. When developing a native plant garden, think about grouping plants that "hang out" together in nature. Observe the arrangements of plants that appear spontaneously in response to environmental conditions. Notice spacing, diversity, repetition, and relationships. Some of the most beautiful gardens borrow design elements from nature.

For example, much of the Inland Empire (IE) region was once covered with the "coastal-sage-scrub" plant community, so these plants would work well together: black sage (Salvia mellifera)

white sage (Salvia apiana)

California buckwheat (Eriogonum fasciculatum)

needlegrass (Nassella species)

yellow bush penstemon (Keckiella antirrhinoides)

A garden incorporating these and other Southern California natives is well-adapted to our Mediterranean climate and lean soils.

Consult the "California Classics Plant Palette" for associations of plants in chaparral, oak-woodland, and desert regions. You can find the list of California classics in the "Horticulture" section of the Rancho Santa Ana Botanic Garden (RSABG) website www.rsabg.org.



Nuturing Natives

by Diana Ruiz

Any piece of your property that you might convert to native vegetation can help offset habitat loss from development, human impacts, and the invasion of aggressive, non-native plants into the wild.

Sustainable Site Design

If you decide to redo your landscape, consider regrading to capture runoff water for plant use and to increase water infiltration into underground aquifers. "Retention-grading" also helps prevent pollutants, such as pesticides, from flowing over property in runoff and washing into storm drains that ultimately drain to local streams and to the ocean. Berms, mounds, boulders and logs add resting spots and hideaways for wildlife.

Consider reducing turf areas to what you truly need for play or pet areas. Replace unnecessary lawn areas with native habitat-landscaping, low water-use groundcovers and hardscape (non-vegetated, hard surfaces). Use "permeable" hardscapes that allow for water percolation into the underlying soil, such as walkways and patios of brick, pavers, stone, decomposed granite, gravel, and permeable paving. For places where you do need a lawn, such as play areas, plant a low water-use turf variety.



What to Plant?

Whether you are planting a native or non-native, consider a plant's need for sun versus shade and your site's condition and aspect in relation to the sun. Start right by selecting high quality container plants. Dig the hole two to three times as wide as the pot's diameter and as deep as the soil level in the pot. Rough the sides of the hole, making it easier for the plant's roots to grow into the native soil.

Unlike most landscaping plants imported from other regions, winter is the growing season for our local native plants, because that's when they get most of their water naturally, from rain. Spring is the flowering season. During the hot summer, native plants are slowing down or going dormant until the winter rains return.

Prime plating time for most natives is November to February. Plant annuals from October to December, trees and shrubs from October to the end of February, and perennials and low growing woody shrubs (subshrubs) from late October to late April. The exception is "riparian" plants; which can be planted at any time. In nature, riparian plants live along waterways, so are accustom to getting more water.

Soil

Use existing native soil as backfill for the planting hole. Adding organic matter may be necessary where construction activities have removed the topsoil or left an infertile surface soil. Most native plants perform better without amendments and fertilizer, however, that's assuming they are starting off in a natural topsoil.

Watering

Due to the winter growing season, native gardens need winter water. Some cannot tolerate summer watering. Over-watering can cause root rot and kill established plants. However, when establishing new plantings, under-watering is a frequent cause of death. Don't water if the soil is moist at root level. Check down into the soil, the surface may appear dry while the roots are still wet. Check the newly planted rootball, but also the surrounding soil in the planting hole. Sometimes the potting soil holds moisture very differently than the native soil.

Many native riparian plants will require an ongoing supply of water throughout the year. That's one of the reasons that irrigation specialists recommend grouping plants by their watering needs, or hydrozoning.

Mulch

Mulch slows evaporation, reduces maintenance by shading out weeds, and creates a favorable environment for soil life, including helpful bacteria and earthworms that aerate the topsoil. Spread mulch, compost, and non-weedy yard waste to cover the soil surface, but keep organic mulches 6-inches away from the base of a plant. Apply mulch 2-4 inches deep to shade out weeds and prevent erosion.

Maintenance

Do a seasonal cleanup of the garden to remove dead, dying and diseased plants. Crowded plants need more frequent pruning and care, so keep their mature size in mind when planning.

Invasives

Please remove invasive plants from your landscape so that they do not spread into the wild. Learn about invasive plants and some native alternatives at www.PlantRight.org.

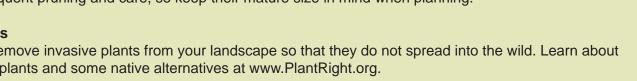
For more information

Refer to "Resources for Gardening with Native Plants" (last page of this guide), the Western Garden Book by Sunset, and Care and Maintenance of Southern California Native Plant Gardens by Bart O'Brien, Betsy Landis, and Ellen Mackey.

Do you need tips on starting a native plant garden?

If you have questions about growing native plants, contact the Native Plant Garden Hotline at (909) 624-0838 or email: hortinfo@rsabg.org. You will also find expert advice on selection, planting, and care of natives at RSABG's new sales area, the Grow Native Nursery (GNN) from 9 AM to 4 PM, Wednesday through Sunday. Find the GNN east of the visitor parking lot, outside the nursery.

Rancho Santa Ana Botanic Garden (RSABG) is the largest botanical garden dedicated exclusively to California's native plants. It is nestled into 86 acres near the foothills of the San Gabriel mountains at 1500 N. College Ave., Claremont, CA 91711; Open 8:00 AM to 5:00 PM. Founded in 1927, the Garden is a private, non-profit organization.

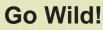








plant's root zone?



by Diana Ruiz

"Wildscaping" is creating a landscape specifically to benefit wildlife. Even if you live in the heart of a city, consider gardening for urban-adapted wildlife by providing a reliable water source and local native plants that provide food, shelter, and nesting sites. Each small patch of yard provides a steppingstone of habitat from wildlands into the city. A patchwork of *habitat-yards* creates an urban ecosystem that more closely mimics our predevelopment, native landscape. When linked together, those patches cumulatively support biodiversity.

It's for the birds!

We can see different birds in the Inland Empire (IE) all year long. Some are year-round residents, while others over-winter or pass through. Many of our winter visitors have different food requirements from our summer birds.

Although there are many books written on the subject of gardening for wildlife, most are written about eastern North American birds. Observe birds in your neighborhood and refer to books, such as *Birdwatching in your Own Backyard for the Inland Empire Area* by Sheila Kee (available from RCRCD) to determine what birds you might attract to your yard. You will find a list of local birds and their food preferences and a list of plants that provide those foods. The plants are grouped according to what type of food they provide: seeds and nuts, fruits and berries, nectar, and insects (the plants support insects and create insect habitat).

Plan a garden that will feed birds throughout the year, while providing shelter and escape from predators. Plant a variety of food sources, plants that flower and bear fruit at different times of the year. "Mix it up" in terms of plant species and plant heights. Create layers of vegetation. Provide a tree canopy, an understory of shrubs, vines, and smaller trees, and low growing groundcovers in a tiered arrangement. Different species will prefer one or more of the vertical layers of vegetation. Some prefer deeply wooded spaces, while other like open fields.

Plant evergreen trees and shrubs in a location where they will help slow prevailing winds and provide year-round shelter for birds. Placed at the northern and eastern edge, they won't shade your yard or home during the cool winter months. Plant deciduous trees in a south and western location to shade your home in summer, and allow in the warm sun during the winter. To avoid destroying bird nests, prune trees and shrubs in fall and early winter, rather than spring.

Wet and Wild

Birds must find water where they can, both for drinking and bathing. A water source attracts more birds than any other feature. Birds need water year-round, not just during summer months.

Local Native Plants for Gardens at the Urban-Wildland Edge

Help maintain regional variation of native plants and animals.

Gardening with plants from the **local** flora helps preserve *genetic diversity* and the integrity of local ecosystems. Not just any California native plant is suitable for landscapes near Inland Empire habitat lands. Local native plants are the safest because they have the unique characteristics that have helped them survive in their specific environments. If plants from other areas crossbreed with our local native plants, the local wild populations could lose some of their unique characteristics that are important for success in this region. This could eventually reduce biological diversity, (aka *biodiversity*). There are important interactions between native plants, microorganisms, and the animals that use them, some of which are critical to the reproduction and survival of native plants and animals.

If your yard adjoins wildlands, please use plants and seeds that have been propagated from local natives to prevent cross breeding with "outsiders" that may be adapted to other parts of California.

If you live on the edge of native landscapes, please refer to "Living on the Edge" for more information about what to plant and how to create a fire-safe landscape. You can find the booklet under Publications at www.RCRCD.com, or request a copy at snyder@ rcrcd.com or (951) 683-7691, Ext. 207. Please provide your name, mailing address and phone number.

From the book: *The California Landscape Garden* by Mark Francis and Andreas Reimann

"The natural resources used in the garden are much like an artist's media, such as watercolors or clay, and they must be handled similarly: with knowledge, creativity, and judicious care. Selecting plants that are adapted to local conditions, preparing the soil to meet their needs, aesthetically grouping the plants that have similar needs - this design process requires an understanding of local climate and native plant species that is infused with an imaginative vision for the prospects of a new garden experience featuring California's nature."

Living Fences: Native Plants for Hedges, Screens and Buffers

by David Fross of Native Sons wholesale nursery.

Our native flora is well known for a diverse wealth of plants suitable for California gardens. A collection of choices can be suggested to satisfy most any requirement a gardener may encounter - grasses and sedges for a meadow, a low growing manzanita as a bank cover, or a collection of dudleyas in containers. In the urban and suburban environments of California the need for privacy is often a priority, and here too plentiful native choices are available to create living fences.



Nevin's Barberry (Berberis nevinii)

In the past, California gardeners have often turned to exotics to fill this garden niche. Escallonia *(Escallonia rubra)* from Chile, Japanese privet (*Ligustrum japonicum*) from Asia, and Oleander (*Nerium oleander*) from the Mediterranean Basin are ubiquitous examples found from Redding to San Diego. Their success is a function of their tolerances. Whether neglected or nurtured, in heavy soil or poor soil, given too much water or not enough, in old gardens and new, they often persist.

Exotics are planted again and again because they have proven their worth in the diverse landscapes of the state. Can native plants measure up in this environment? Do we have a palette of shrubs and small trees that will tolerate the sometimes odd and challenging environment of urban California? Certainly, and although not as common as Oleander and privet, California native plants offer equal utility, growth rates, and garden tolerance.

A classic example of a living fence can be seen at the Santa Barbara Botanic Garden. Lemonadeberry (*Rhus integrifolia*), was planted in the 1940s to screen the nursery and frame the courtyard. Planted three feet on center, the evergreen shrubs quickly grew together to form a handsome hedge. Pruned three to four times a year in a formal style, the planting has been maintained at varying heights to eight feet. A number of commonly available California natives can be used in this fashion with equal success. Pacific wax myrtle (*Myrica californica*) and California bay (*Umbellularia californica*) are suitable to use as a hedge, and they will tolerate moist sites found near lawns or frequently irrigated borders. Toyon (*Heteromeles arbutifolia*), mountain mahogany (*Cercocarpus betuloides*), hollyleaf cherry (*Prunus ilicifolia*), and Catalina cherry (*Prunus lyonii*) can also be sheared regularly as a formal hedge, or pruned occasionally for a smaller urban space.

All of the above-mentioned choices are appropriate for informal hedges. The columnar or narrow habit and garden tolerance of Pacific wax myrtle, toyon, and mountain mahogany make them suitable for smaller gardens common to urban areas. If the garden soil is even moderately well drained, an additional range of California natives can be considered. Many upright cultivars* in the nursery trade make excellent natural screens with minimal pruning. California lilac *(Ceanothus)*, alone offers a bewildering range of choices; fast growing



Lemonadeberry (Rhus integrifolia)



Manzanita (*Arctostaphylos* 'Austin Griffiths')

and longer-lived selections include *Ceanothus* 'Ray Hartman', *Ceanothus arboreus* 'Cliff Schmidt', and *Ceanothus thyrsiflorus* 'Snow Flurry'. Manzanitas, *Arctostaphylos* species, such as *Arctostaphylos bakeri* 'Louis Edmumds', 'Hood Mountain', and 'Austin Griffiths' could be used in combination to create a striking eight to twelve foot screen, but regular pruning is not recommended.

*Cultivar: a cultivated race or variety of a plant that has been created or selected intentionally because of its decorative or useful characteristics. It is usually distinct from similar plants and retains those characteristics when propagated.

Ample garden space would provide additional choices, including many smaller trees, such as Tecate cypress (*Cupressus forbesii*) or desert willow (*Chilopisis linearis*), and larger shrubs, such as flannel bush (*Fremontodendron* 'California Glory') or elderberry (*Sambucus mexicana*). Note that stellate hairs on flannel bush can be irritating, so plants should be carefully placed. Even a wild grape, (*Vitis californica*) can be trained to clamber up a chain link fence or a dull concrete wall to add seasonal green texture and fall color to an existing constructed screen.

Historically, California native plants have been recommended for a single purpose, either to reduce water usage, lower maintenance costs, or attract wildlife, and their functional versatility has been overlooked.

The urban and suburban landscape in California is a challenging and extraordinarily varied environment, but our native flora offers solutions that are limited only by our imagination.

Dave Fross is the president of Native Sons Wholesale Nursery and teaches horticulture at Cal Poly State University, San Luis Obispo. He is coauthor of *California Native Plants for the Garden* and *Ceanothus*.

Native Bunch Grasses for Your Garden

by Barbara Eisenstein, Horticultural Outreach Coordinator Rancho Santa Ana Botanic Garden

I must confess, I am in love with California bunch grasses – the bigger and "poofier," the better.

Three of my favorites are warm season grasses – they grow during the summer and are dormant in winter. Deer grass (*Muhlenbergia rigens*), three foot tall and wide, has bright green blades with long, thin graceful flowering stems that sway in the breeze. Prairie dropseed (*Sporobolus airoides*), similar in size and texture to deer grass, has delicate, open, airy seed heads. Purple three-awn (*Artistida purpurea*), is slightly smaller, with an abundance of purplish fine, sharp awns that fade to a tawny gold. All three have low water requirements and can accept full sun to part shade.



Deer grass (Muhlenbergia rigens)

Deer grass and prairie dropseed turn fawn-colored in winter. They respond well to a "haircut" in late spring. Weed-whip, mow or prune the grasses nearly to the ground, follow up with a dilute application of fertilizer and water. Before you know it, lush green young leaves will appear. If you prefer a tawnier, more naturalistic look, leave them alone and the new leaves will emerge through last year's ecru-colored blades. Purple three-awn just keeps performing all year. It can be pruned any time, though allowing the flowers to mature shows them at their best.

The needle grasses, *Nassella lepida, N. pulchra, N. cernua*, are cool season grasses – they go dormant during the summer. These are smaller and less dense than the summer grasses mentioned above, and have large, fine needle-like flowers and seed heads. Needle grasses look wonderful interspersed among large boulders. During the summer they will stand straw-like in the garden, or trim them to the ground and await their reappearance when the rains come. Hold off on water when grasses are dormant to keep them from rotting.

Exotic grasses have been popular garden choices for many years. Unfortunately some are highly problematic invasives, such as fountain grass (*Pennisetum setaceum*) and pampas grass (*Cortaderia selloana* and *C. jubata*). If you are tempted to use these, consider the many wonderful and diverse native alternatives, including those described here.

Resources for Gardening with Native Plants

Gardens and Seasonal Plant Sales

To find locations

Rancho Santa Ana Botanic Garden 1500 North College Avenue, Claremont Grow Native Nursery at RSABG

Theodore Payne Foundation for Native Plants 10459 Tuxford St., Sunland (North of LA)

Maloof Foundation for Arts ad Crafts 5131 Carnelian St., Alta Loma, CA 91701

Landscapes Southern California Style 450 Alessandro Blvd., Riverside

Chino Creek Wetlands & Educational Park 6075 Kimball Avenue, Chino, CA 91708

Chino Basin Water Conservation Garden 594 San Bernardino St., Montclair

University of California, Riverside Botanic Garden

Gardening Advice

RSABG Horticulture Hotline for native gardening University of California Cooperative Extension Master Gardeners Master Composters Online Landscape Design Tool[®] Las Pilitas Nursery

Native Plant Nurseries

Locate suppliers of native plant materials www.cnplx.info/allSites.html If you live at the edge of wildlands, please request plants and seeds that were produced from local seed.

Mockingbird Nursery, Riverside Tree of Life Nursery, San Juan Capistrano El Nativo Growers, Azusa Cal-Native Plants, Menifee Las Pilitas Nursery, Escondido Native Grow Nursery, Brea

Websites

California Native Plant Society (CNPS) Riverside/San Bernardino Chapter, CNPS California Oak Foundation

Plant Databases and More

Be Water Wise: So Cal Water Agencies CalFlora USDA Plants Tree Selection Guide for California www.gardens.com

(909) 625-8767 (909) 624-0838 www.rsabg.org

(818) 768-1802 www.theodorepayne.org

(909) 980-0412 www.malooffoundation.org

(951) 780-4177 www.wmwd.com/landscape.htm

(909) 993-1600 www.ieua.org/facilities/wetlands.html

(909) 626-2711 www.cbwcd.org

www.gardens.ucr.edu

(909) 624-0838, rsabg.hortinfo@cgu.edu (951) 955-1340 http://ucanr.org (951) 955-1340 M-F 9AM - 12PM (951) 486-3200 www.rivcowm.org http://www.mynativeplants.com/site

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(949) 728-0685 www.californianativeplants.com
(626) 969-8449 www.elnativogrowers.com
(951) 301-8075 www.cal-nativeplants.com
(760) 749-5930 www.laspilitas.com
(949) 481-9090 www.nativegrow.com

www.cnps.org www.enceliacnps.org www.californiaoaks.org

www.BeWaterWise.com www.calflora.org http://plants.usda.gov http://selectree.calpoly.edu/

Books

Care & Maintenance of Southern California Native Plant Gardens by B. O'Brien, B. Landis, E. Mackey California Native Plants for the Garden by Dave Fross, Carol Bornstein, and Bart O'Brien Native Plants for School Gardens by Betsey Landis.

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