



Perennials

Perennials are one of the most neighborly plant groups. They live within nearly every plant community. They help landscapes recover from fire or flood. And they are committed to community connections—they evolve soil complexity, birds and bugs devour their seeds, and 95% are animal pollinated, supporting bees, butterflies and many other important pollinators.

Perennials provide connections and cheer. Technically, a perennial is any dicot that lives longer than two years (grasses are monocots). However, that distinction includes shrubs and trees, which most of us don't think of as perennials. More precisely defined, a perennial is herbaceous, which means its stems are non-woody. Some perennials, such as bulbs, dieback each year; some, such as buckwheat, go dormant in either winter or summer; and some—*Dymondia*, for instance—grow nearly all year. This chapter also includes some plants that are considered sub-shrubs; the plants like lavender that sit between perennials and shrubs.

This chapter provides general growing tips followed by specific recommendations for both low-growing rooting perennials and the larger varieties.



The perennial gardens at Camrosa Water District, Camarillo.

General Growing Tips

Below are general guidelines for growing perennials and includes information on irrigation, soils, fertilization, pruning and propagation. Following this section are specific recommendations for individual perennials.

Irrigation / Water Requirements

Irrigation for low-growing, rooting perennials is typically different than for the larger perennials. The low growers are commonly used because they are aggressive enough to choke out weeds: in essence,

they become the weed. To get the density necessary to be an effective weed block, these perennials need overhead sprinklers. An even distribution of moisture allows for a greater distribution of rooting. Also, unlike most of the other plants in this book, these low growers should get water at a greater frequency, but for a much shorter duration.

The larger perennials are better suited to low-flow and spot irrigation. In fact, overhead irrigation increases chances of rot and pest problems for many of these plants.

Soil and Fertilization

The perennials listed in this chapter come from many different Mediterranean environments including fire-scarred, scrubland, desert, savannah, meadow, streamside, floodplains, and woodland understory. Therefore sweeping recommendations are problematic. However, there are general differences between the two groups presented below.

Low-Growing Rooting Perennials: Most of the plants in this list are either streamside or woodland perennials; there are few desert perennials in this category. Aggressive ground covers come from environments with more water and nutrients. Generally, this group favors light but more frequent watering, soil with neutral to slightly acidic pH, and low to moderate amounts of organic matter and nutrients. Fertilization may be needed because wood chips, mulch and compost can smother these low growers. Good all-purpose organic fertilizers include activated sludge, manures, and animal meals, such as blood and bone meal.



In the right conditions yarrow (*Achillea* spp.) will take over. It spreads by both underground stems and seed.

Larger Perennials: This is a tougher bunch and desert and scrub perennials are better represented. Generally, many of these plants (but not all) favor a soak and dry cycle of irrigation, neutral pH (with many tolerating slightly alkaline) and low levels of nutrients. Wood chips, mulches, and compost are all that is needed. These perennials are more prone to rot than the low growers.



This beautiful garden is awash in large perennials—Mexican bush sage, Mexican lobelia, rosemary and Santa Barbara daisy flourish.

The recommendations below represent the environment from which they evolved.

Pruning

Low growing rooting perennials can be maintained with a variety of approaches. Mowing, pinching, shearing, thinning and weed whacking can all be used. Some of these plants get cut nearly to the ground, while others are rarely touched.

The larger perennials may need to be lightly sheared for compactness or containment, selectively thinned for aesthetics and health, or both.

As a Rule

- Avoid pruning out of season; it increases chances of climatic injury and pest infestations.
- Never prune when the soil is wet or soggy. Soil compaction is the result, which creates a slew of ill effects. Any work should occur when the soil is dry, or just slightly moist.

Propagation

Perennials are generally easy to propagate. Both their vegetative parts and seeds are eager to root.

Plants in the low-growing rooting perennial section propagate readily from above ground stems (stolons) and/or underground shoots (rhizomes), both of which can be cut off the plant and planted elsewhere. The larger perennials can be started by 5" stem cuttings from the growing ends. These cuttings can either be put in a glass with a couple inches of water, a proper rooting medium, or planted directly into the ground, although the later has the lowest success rate. Some of these larger plants also produce root offshoots, which can be cut from the plant.



Coral bells are notorious spreaders and easily propagated by digging out and dividing the young starts.

Individual Plant Care

The plants below are listed by their botanic names. They are also cross-listed by their common names at the end of the chapter.

Note: *Irrigation requirements are expressed in the amount of inches a soil should dry before receiving supplemental water. Of course, if a soil never dries to prescribed depth, which is not uncommon during monsoons, then the plant requires no irrigation.* ■

Low Growing and Rooting Perennials

Achillea spp. Yarrow

Meadow natives from Southern California. Can dry to 4" spring and summer, 6" in fall. No irrigation in winter. Low nutrient needs and nothing more than wood chips, mulch or compost is required. Deadhead in fall. Divide, seed and plant late fall/ early winter.

Armeria spp. Sea pink or Thrift

Coastal plant. Dry to 4" to 5" between watering in spring through fall, but only to 2" to 3" inland. Dry to 6" in winter. Low nutrient needs; wood chips and mulch may be occasionally needed in late winter/early spring. Drainage is essential. Rots in dense, fertile or moist soils. Deadhead in late summer. Divide and plant late winter/spring.

Aurina saxatile Basket of gold

Dry to 4" year around. Prone to rot in moist dense soils. Low nutrient needs and mulch and compost will do. If looking rangy, then cut the plant in half in late fall. Plant in late fall/winter.

Calylophus berlandieri, C. hartwegii Sundrops

Favors dry conditions and can dry to 6" along coast and 4" inland spring and summer, dry to a 1' in fall. No irrigation in winter. Moderate nutrient needs but the plant blooms a little better if a light (reduce strength by ¼), well-balanced fertilizer is given late winter every year. If rangy, cut or mow to a couple inches in late winter/ early spring.

Ceratostigma plumbaginoides Dwarf plumbago

Dry to 4" in sandy soils (its preference) and to 6" in clay. Low nutrient needs; wood chips, mulch, or compost is all that is needed. If looking lackluster, then a light, well-balanced fertilizer late winter will help. Mowing or shearing every other year can increase vigor and regeneration from rhizomes. Propagate by pushing stems into the soil in late fall/winter. Plant in late winter/spring.

Chamaemelum nobile Chamomile

Tough plant. Can dry to 4" spring and early summer, 6" in fall. No irrigation in winter. In dense, heavy soils dry to 6" in spring and summer. Low nutrient needs; nothing more than wood chips and mulch is required. Propagate from cuttings in winter. Push rooting stems into ground and plant in late winter/spring. Seed in fall.

Clinopodium (Satureja) douglasii Yerba buena (Yerba yuena)

Californian coastal native. Fog-adapted, it looks best if it does not dry to more than 4" year round. Moderate nutrient needs; as well as yearly compost, it may require organic supplements, especially if grown in poor soil. If rangy looking, mow or shear in late winter/early spring. Pinch or lightly shear to induce bushiness. Easy to propagate by stem cuttings.

Convolvulus mauritanicus, C. sabatius Ground morning glory

Dry to 5" along coast; 3" to 4" inland. Suffers from overwatering in clay soils. Low to moderate nutrient needs; compost and a well-balanced organic fertilizer may be needed every other year. If looking rangy, thin and shear to 3" in late winter. Seed and plant late winter/early spring.

Coreopsis auriculata 'Nana' Tickseed

Dry to 4" in spring, 6" in summer and fall. No irrigation in winter. Low to moderate nutrient needs; mulch and compost will do. Dead-head by shearing in mid-summer. Taking cuttings, seed and plant late winter/spring. Sometimes short-lived.

Duchesnea indica Indian mock strawberry

Grows best with regular water. Dry to only 3" in spring and summer, 6" in fall and winter. Moderate feeder and compost or a yearly application of a well-balanced fertilizer may be needed. If looking rangy or weedy looking, mow to 2". Take root cuttings and/or plant in late winter/early spring.

Dymondia margaretae Dymondia

Although it tolerates drought, dymondia grows best and out competes weeds if only slightly dry between watering; dry to 3" in spring and summer, 5" in fall. No irrigation in winter. Low nutrient needs, but because of its tight-matting nature, fertilize every year with a light, well-balanced organic supplement late winter/early spring. Plant root offsets in late winter/early spring.

Erigeron karvinskianus Mexican daisy or Santa Barbara daisy

Drought and fire-adapted. Let dry to 4" in spring, 6" in summer and fall. No irrigation in winter. Low to moderate nutrient needs; mulch, compost and an occasional organic supplement will be needed. To encourage rich new growth, mow nearly to the ground in winter/early spring at a minimum of every other year.

Erigeron glaucus Seaside daisy

California coastal plant that looks better if it never dries to more than 4" spring and summer, 6" in fall. No irrigation in winter. Moderate nutrient needs; compost and an occasional organic supplement will be necessary. If looking listless, ratty or pest-infested, cut back to a couple inches above soil in late fall and mulch. Individual plants may not be long-lived, but they do spread and seed.

Fragaria chiloensis, F. vesca (californica) Wild strawberry, Sand strawberry

For densest cover, do not dry to more than 4" along the coast, 2" inland, spring through fall. No irrigation in winter. Moderate nutrient needs. Because of its dense, matting nature, well-balanced organic fertilizers will be required; early spring is the best time to apply. If rangy or listless, mow and rake out dead foliage in late winter. Divide and plant in late winter/early spring. *F. vesca* is better in dense soils.

Gazania hybrids Gazania

Dry to 4" along the coast spring through fall; no irrigation in winter. In the hotter, drier areas gazania looks better if only dried to 2" to 4" year round. Moderate feeders; compost is recommended yearly, organic supplements every other year. Clumps or patches will occasionally die off; plan on replanting every 2 or 3 years.

Grindelia hirsutula gumplant

Coastal native in Southern California and cool season grower. Dry to only 4" in winter and spring, but up to 9" in summer and fall. May require more irrigation in coarse or sandy soils. Low nutrient needs; wood chips and mulch is all that is needed. Take cuttings in winter. Plant in late fall/winter.

Helichryum spp. Curry and Licorice plants

Dry to 4" spring and summer, 6" in fall. No irrigation in winter. Too much water and fertilizer will shorten this plant's life. Leaves laying on moist soil will rot. Low nutrient needs; mulch and compost will do. Regular pinching will help maintain strong form. Push stems into ground to root in winter. Plant in late fall and winter.

Herniaria glabra Rupture wort

Dry to only 4" year around. Moderate nutrient needs; well-balanced organic concentrates will be needed yearly. Push stems into soil to root and plant late winter/spring.

Heuchera spp. Coral bells or Alum root

Some Southern California natives. Winter dormant. Dry to just 4" spring, 6" in summer and fall. No irrigation in winter. Moderate nutrient needs. Apply mulch or compost yearly. If the plants become too dense and mulches become infeasible, use a light well-balanced organic supplement. Propagate and plant in early spring. Prone to mites in dry, dusty environments; wash foliage yearly to prevent an infestation.

Lessingia filaginifolia 'Silver Carpet' California beach aster or Sand aster

California native and summer dormant. Dry to 4" in late winter and spring, to 8" in summer and early fall. Dries to a 1' in the shade. Low nutrient needs; wood chips and mulch will do. Too much moisture and nutrients will shorten its life. Propagate by pushing stems into moist soil late fall and winter. Plant in late fall/winter. Little care needed along coast.

Malvastrum lateritium Trailing mallow

Tough and durable. Dry to 6" in spring, 9" in summer, and just 4" in late fall and winter. Low nutrient needs; mulch and compost are sufficient. If looking rangy, mow or shear to 2" late fall/early winter. Stems root easily; cut and push them into the soil in winter.

Matricaria recutita German chamomile

A summer grower. Prefers only drying to 4" in spring and summer, but can dry to 6" in fall. No irrigation in winter. Low to moderate nutrient needs; mulch and compost usually suffice. The plant may struggle in dense clay soils. Take stem cuttings in winter, plant early spring. Sow seeds collected in fall in late winter/spring. This chamomile is said to be sweeter than *Chamaemelum nobile*.

Mentha x piperita*, *M. spicata Peppermint and Spearmint

Can dry to 6" in considerable shade, but no less than 4" year round if in full sun. Likes fertile acidic soils, and mulch, compost and humus are all that is needed. Pinch or shear to induce bushiness in late winter/early spring. If rangy looking, mow or shear to 2" in winter. Propagate stems by pushing them into the ground in winter. Prone to mites in dry dusty environments; washing the foliage yearly helps.

Monardella villosa Coyote mint

Native to the northern parts of the state. Dry to 6" year around. Low to moderate nutrient needs; wood chips or mulch and occasionally humus will suffice. If looking rangy, shear the top two-thirds in late winter/early spring. Propagate by pushing stems in soil in late winter/early spring.

Nepeta cataria Catnip

Dry to 3" in sandy soils, but up to 6" in clay soils in spring through fall. No irrigation in winter. Moderate nutrient needs; yearly compost plus an occasional well-balanced organic supplement will improve appearance. If rangy looking, mow or shear to 2" in late winter/early spring.

Oenothera elata hookeri Hooker's evening primrose

Southern California native with its home in areas of seasonal flooding. Prefers a wet winter and spring, drying to only 3", and a dry summer and fall, drying to 6" or more. Moderate nutrient needs. In average soil yearly wood chips and mulch should be sufficient; in sandy soil, a well-balanced organic supplement may be required as well. Do not deadhead until late fall to ensure seed dispersal. Divide and plant in late fall/early winter.

Origanum majorana*, *O. vulgare Sweet marjoram, Oregano

Tough, but needs a wet spring and early summer, drying to only 4". Can dry to 6" in fall. No irrigation in winter. Low nutrient needs; wood chips, mulch and compost will suffice. Will rot in dense clay and moist soils. If looking rangy, shear or mow to 3" in late winter/early spring. Propagates easily from divisions and stem cuttings in winter.

Osteospermum fruticosum African daisy, Freeway daisy

Drought-adapted, but it looks better if irrigated. Dry to 4"–6" throughout the year, depending on distance from coast. Moderate nutrient needs; well-balanced organic supplements, even chemical fertilizers, may be needed yearly. Pinch or lightly shear growing tips to encourage compactness. If looking rangy or twiggy, mow to 4" in late fall/early winter.

Pelargonium spp. Common geranium, Ivy geranium, Martha Washington

Dry to 4" in spring and summer, 6" in fall and winter. Moderate nutrient needs; well-balanced organic fertilizers should be given yearly. Pinch or shear to induce bushiness. Propagate by cuttings in winter. Prone to all types of biting/sucking insects. Keeping the area dry and using companion plants helps reduce infestations.

Phyla nodiflora Lippia

Southern California native found along and near streams and wetlands. Prefers drying to no more than 4" in winter and spring, no more than 6" in summer and fall. Low to moderate nutrient needs, but because of its matting nature, light well-balanced organic supplements may be needed every other year. Might suffer in dense soils. Mow or shear rangy twiggy growth late winter/spring. Push stems in soil to propagate in winter/spring. Prone to nematodes.

Potentilla spp. Potentilla or Cinquefoil

Many Southern California natives. They are found mostly along streams and wetlands. Dry to 4" year round. Moderate nutrient needs; compost and well-balanced organic fertilizers may be needed yearly. It favors good drainage and aeration may be necessary if in area with foot traffic or where soil has been compacted. Mow or shear yearly in late winter/early spring to remove rangy, twiggy growth. Propagation is easy with stem cuttings and root divisions in winter/spring.

Salvia chamaedryoides Germander sage

Dry to only 6" winter and spring, but 9" in summer and 1' in fall. Low nutrient needs; wood chips and mulch will suffice. Favors well draining soils and suffers in clay, especially if wet. Deadhead late fall. Easy to spread by pushing stems into ground in winter. Plant in late winter/spring.

Salvia sinaloensis Sinaloa sage

Dry to 4" in spring, 6" in summer, 9" in fall. No irrigation in winter. Moderate nutrient needs; as well as compost, a mild well-balanced organic supplement may also be needed. It prefers coarse soils—clay soils with moisture may kill it. If looking rangy, mow or shear to 3" late winter/early spring. Propagates easily by pushing stems into ground in late winter/early spring.

Salvia sonomensis Sonoma sage

California native. Dry to only 6" in winter and spring, 9" in summer and fall. Low nutrient needs; wood chips, mulch or compost may be needed yearly. Favors shade and struggles in sun, especially inland. If looking rangy, mow or shear to 2" late fall/early winter. Easy to propagate by pushing the stems into soil in winter.

Sidalcea malviflora Checkerbloom or Prairie mallow

Coastal/near coastal Southern California native. Favors a wet winter and spring. Dry to just 4" during that period but can dry to 6" to 9" in summer and fall depending on distance from coast. Low nutrient needs; wood chips, mulch or compost is all that are required. Deadhead after the seeds have set in summer. Propagates easily from rooting stems in winter/spring.

Sisyrinchium bellum Blue-eyed grass

Despite its common name, this is not a true grass. Native to the canyons and crevices of Southern California. Treat as a warm season grower. Dry to 3" to 6" in spring through fall. No irrigation in winter. Needs much less irrigation in shade. Low to moderate nutrient needs; nothing more than mulch, compost or humus required. Since it is a slow spreader seedlings should be encouraged; deadhead in late summer after seeds have matured. Plant late winter/early spring. Propagate by division and seed.

Stachys byzantina Lamb's ears

Dry to 4" in spring through fall. No irrigation in winter. Moderate nutrient needs; while wood chips and mulch are best, organic supplements may be needed because of its matting nature. The plant will rot with too much moisture, humidity and overhead irrigation. Remove dead leaves and stems year round. Vigorously thin in late winter/spring to invigorate. Propagates easily from stem cuttings in spring.

Stachys bullata Hedge nettle

Southern California native. In full sun dry to 5" spring/summer, 9" in fall. No irrigation in winter. In the shade, dry to 9" late winter/spring. No irrigation fall/winter. Low to moderate nutrient needs; yearly mulch and compost may be needed. If looking rangy, mow or shear to 4" late winter/early spring. Spreads by rhizomes and easy to propagate and plant in spring.

Symphotrichum chilense California aster

Southern California native. Dry to 4" spring and summer, 6" in fall. No irrigation in winter. Low nutrient needs; yearly light application of wood chips or mulch is all that is needed. Weed whack in fall if looking rangy. Propagate and plant in late winter/spring. Favors clay soils.

Teucrium cossonii Majorcan, Teucrium or Fruity germander

Dry to 4" in spring, 6" to 8" in summer and fall. No irrigation in winter. Low to moderate nutrient needs; mulch and compost will do. Will rot in dense, moist soils. If rangy looking, mow or shear to 2" to 3" in late winter/early spring. Propagate by pushing stems into soil in spring.

Thyme spp. Thyme (the creeping varieties)

Dry to 4" year-round inland, 4" to 6" along the coast. Moderate nutrient needs; a mild well-balanced organic supplement may be needed because mulch and compost smothers the plant. Will suffer in dense, wet soils. If rangy, mow or shear to 1" to 2" late winter/spring. Propagate by stem cuttings in late winter through spring.

Tradescantia pallida, P. spathacea Purple heart, Moses in the cradle

Looks best if it never dries more than 4" to 6" year round. Moderate feeder; mulch or compost will be needed yearly, plus an occasional mild organic fertilizer low in nitrogen. Pinch or shear *P. pallida* for compactness. Propagate from stem cuttings in spring.

Trifolium spp. Clover

This Genus includes both Southern California natives and invasive weeds. Dry to only 4" in late winter through early summer, then 6" in summer through fall. No irrigation in late fall/early winter. Though it is a nitrogen fixer that needs little nutrients once established, a mild organic supplement can improve appearance. If rangy, mow or shear to 1" to 2" late winter/early spring.

***Tropaeolum* spp.** Nasturtium

Dry to only 4" in spring, 6" in summer and fall. No irrigation in winter. Low to moderate nutrient needs. Since it is difficult to mulch and compost, a mild organic fertilizer may be needed every other year for best appearance. Favors sandy soils. If looking rangy, mow or shear to 4" in late winter/early spring. Collect seeds late spring and sow in winter through early spring.

Verbena peruviana*, *V. pulchella gracilior*, *V. tenuisecta Verbena, Moss verbena

Dry to 4" in spring, 6" in summer and fall. No irrigation in winter. Low nutrient needs; mulch and compost will suffice. Will rot in dense wet soils and/or wet, humid conditions. Pinch or lightly shear in early spring to induce bushiness. Easy to propagate from stem cuttings; push them into the ground in late winter through early spring.

Veronica liwanensis*, *V. repens Turkish speedwell, Creeping speedwell

Dry to 4" in late winter and early spring, and 6" the rest of the year. Low to moderate nutrient needs; usually nothing more than mulch and compost is necessary. Dry between waterings. Pinch or shear to induce bushiness in late winter/early spring. Propagates easily from stem cuttings in winter and spring.

Individual Plant Care: Larger Perennials

Agapanthus africanus*, *A. orientalis Lily of the Nile

Dry to 9" spring/summer and to 1' fall/winter along the coast; but inland dry to 6" in spring/summer, 9" in fall/winter. Low nutrient needs; a regular layer of mulch or compost will do. Deadheading in late summer and removing dead leaves are the only maintenance tasks.

***Anigozanthos* spp.** Kangaroo paws

Dry to only 4" to 6" in spring through fall. No irrigation in winter. Moderate nutrient needs; an organic supplement low in phosphorus will be needed every spring. Prefers good drainage and will rot with too much moisture. Deadheading and removing dead leaves are the only pruning tasks.

Artemisia douglasiana California mugwort

Southern California native found along the scoured banks of rivers, creeks and flood plains. Dry to 6" throughout the year. Low nutrient needs; wood chips and mulch will suffice. Favors coarser soils. Deadhead after the summer flowers have set seed in fall. If rangy or twiggy, mow or shear to 4" in winter. Spreads by rhizomes and is easily propagated by root divisions in spring.

Artemisia schmidtiana Angel's hair

Dry to 6" in spring/fall, 4" in summer. No irrigation in winter. Requires almost no irrigation in the shade along the coast. Can rot with too much moisture. Modest nutrient needs; besides a layer of wood chips, a light well-balanced organic supplement may be needed every year in early spring. Pinch and lightly shear to maintain compactness. Does not respond well to pruning. Might be short-lived.

***Asclepias* spp.** Milkweed

Includes some California natives (but these are harder to find). Along the coast dry to 4" to 6" spring through fall. No irrigation in winter. Inland dry to only 3" to 4", 6" in winter. Low to moderate nutrient needs; mulch, compost and a light well-balanced organic supplement may improve appearance. Apply mulch in fall, organic supplements in late winter/spring. Cut nearly to ground in late fall if looking rangy. Taking cuttings of plant and root in spring. Plant in winter through spring. Readily reseeds itself if allowed. Importantly, do not be worried about insect damage—the caterpillar of the Monarch devours the plant.

***Coleonema* spp.** Breath of heaven

Dry to 4" along coast, 2" to 3" inland, in spring through fall. No irrigation in winter. Low nutrient needs; nothing more than a light layer of compost is needed yearly. Deadhead late spring. Thin and shear plant in late winter/early spring to induce bushiness and encourage spread by rhizomes.

Cordyline australis Grass palm

Although drought adapted, this plant look better with a little irrigation: dry to 4" in spring, 4" to 6" (depending on distance from coast) in summer and fall. No irrigation in winter. Low to moderate nutrient needs. If mulch and compost do not improve appearance, then a light well-balanced supplement in spring will. Removing dead leaves is the only pruning task. If the plant gets too tall, cut the stem to the ground, cut the cane to a better height, and plant the cane in well draining soil in late winter/early spring. The original plant may resprout.

Dianella tasmanica Flax lily

Dry to only 4" in spring and summer, 6" in fall. No irrigation in winter. In the shade it can dry to 6" to 9" spring through fall. Moderate to high nutrient needs; compost, humus and well-balanced organic fertilizers will be required. Deadheading late summer and pulling dead leaves are the only pruning tasks. Easy to propagate from divisions.

Dietes spp. Fortnight lily, African iris

Dry to 1' in spring, 6" in summer, 1' in fall. No irrigation in winter. Moderate nutrient needs and compost and organic supplements will suffice, although an organic supplement may spur more blooms. Deadheading is the only task you need to schedule. Divide if plant becomes too crowded.

Epilobium (Zauschneria) canum California fuchsia or Zauschneria

Southern California native found in coastal-influenced areas. Very drought-adapted and should dry to 6" in spring and summer, 1' the rest of the year. Low nutrient needs and wood chips or mulch is all that is needed. Can reseed, so delay deadheading until late fall. If looking rangy, cut two-thirds in late winter. Start cuttings and plant in late fall/winter.

Eriogonum spp. Buckwheat

Many Southern California natives. Tough and durable. Along the coast they rarely need irrigation once established. Dry to 6" inland in spring and summer, and no irrigation in fall and winter. Can rot in dense and moist soils. Low nutrient needs; nothing more than wood chips or mulch is necessary. Pinch and shear when young to promote bushiness and shape in winter. Seed and plant in late fall/winter. The plants are often short-lived in urban areas.

Euphorbia characias, E. rigida Mediterranean and Gopher spurge

Winter dormant and tough. Dry to 6" spring and summer, 1' in fall and winter. Low nutrient needs; mulch or compost is sufficient. Deadhead late summer. Propagate from cuttings (easy) in early spring. Plant in late winter/spring. It easily reseeds if allowed.

Gaura lindheimeri Gaura

Along coast dry to 6" in spring through fall. No irrigation in winter. Inland dry to 4" year-round. Deadhead after seeds have matured in fall; if reseeding is undesirable, deadhead in summer. Low nutrient needs; nothing but wood chips or mulch is needed. If looking rangy or tired, cut stems nearly to ground late fall/early winter. Plant in winter and spring.

Hemerocallis hybrids Day lily

Dry to 4" in spring, 6" in summer and fall. No irrigation in winter. Moderate nutrient needs; organic supplements will improve blooms. Deadheading in mid-summer and pulling dead leaves in early spring are the only tasks. If it becomes too crowded, then divide.

***Iris douglasiana*, I. 'Pacific Coast Iris'** Pacific coastal iris

Central and northern California coastal native. Dry to 4" winter, 6" in spring, and 9" in summer and fall. Does not need irrigation in summer or fall if in shade along the coast. Low to moderate nutrient needs; a layer of wood chip or mulch will do. Can rot in dense wet soils. Deadhead late spring. Snip dead leaves from plants late winter. Propagate by division in winter.

Juncus mexicanus Rush, mexican

Southern California native. Grass-like perennial. Used in infiltration basins and wet, compacted areas. Can dry to 6" in summer, but only 2" dry in late fall and spring. Low nutrient needs; mulch and compost is all that is needed. If untidy or rangy, cut or mow nearly to ground in fall. Plant and divide in late winter/early spring if used in infiltration areas. With good drainage and moisture it will spread and need coralling.

Juncus patens Rush, California grey

Southern California native. Grass-like perennial treated as a cool season grass. Dry to 6" in summer and 2" in winter and early spring. Moderate nutrient needs; yearly mulch and compost will do. Divide and clean in fall. Plant in early spring. Voracious spreader in moist sandy conditions and it will need coralling.

***Kniphofia* spp.** Red hot poker, Torch lily

Dry to 6" in spring and fall, 4" in summer. No irrigation in winter. Can rot with too much winter moisture. Moderate nutrient needs and mulch and compost will usually do; although it may bloom better with a complete fertilizer in late winter/early spring. Deadhead in summer. Remove dead leaves early spring.

Limonium perezii Sea lavender

Having escaped to the wilds and naturalized along Southern California's coast, this is one tough plant. Cool season grower. Depending on distance from the coast, dry to 4" to 6" in winter and spring, and 6" to 9" in summer and fall. Suffers in dense soils. Low nutrient needs, but sometimes looks better with an organic supplement boost. Along with mulch or compost, add a general-purpose organic fertilizer every other year. Pull dead leaves early spring. Deadhead late spring through early fall, although waiting until late fall will allow it to sow itself. Easily propagated by division.

Lobelia laxiflora Mexican lobelia

Monsoon-adapted and dry to only 6" during summer, but 9" spring and fall. No irrigation in winter. Low nutrient needs; wood chips and mulch will do. Deadhead in fall. If rangy looking, shear to ¼" late winter. Can propagate from root divisions late winter/early spring. Does better inland.

Lomandra spp. Mat rush

Dry to 6" in spring and summer, and 9" in fall. No irrigation in winter. Low to moderate nutrient needs; a thick layer of wood chips, mulch or compost will suffice. Deadhead in late summer. If looking tired or rangy, cut down to 6". Easily propagated from rhizomes.

Lotus scoparius Deerweed

A cool season grower and a Southern California native to coastal-influenced slopes. Dry to just 6" winter and spring, but to 1' in summer and fall along the coast, and 9" inland. Low nutrient needs; wood chips and mulch will suffice. Suffers in dense wet soils. Remove crossing branches, damaged stems, and rangy growth late winter/early spring. Might be short-lived.

Pelargonium Scented geranium

Tougher than the other common geraniums. Dry to 4" in spring, 6" summer and fall. No irrigation in winter. Low to moderate nutrient needs; typically all that is needed is mulch or compost. Tip or shear new growth late winter to induce bushiness. If looking rangy, cut back to succulent growth every few years. Propagates easily from cuttings, which should be taken and planted in winter. Plant late winter/early spring.

Penstemon centranthifolius, P. eatonii, P. heterophyllus, P. pseudospectabilis, P. spectabilis penstemon: Scarlet bugler, Firecracker, Foothill, Desert, Showy

This description is for the Southwestern native perennials, some of which are from Southern California. Drought-adapted and summer-dormant. Dry to only 5" in winter and spring, to 9" in summer and fall. Low nutrients needs; wood chip and mulch will do. They typically suffer in dense, fertile, moist soils. Deadhead mid-fall, in order to let the plants set seed. Can be short-lived in urban areas. Propagate by stem cuttings or seed when it gets cold, typically in early winter. *P. spectabilis* can be propagated by root division.

Phlomis russeliana Turkish sage

Tough. Dries to 6" in spring, summer and fall along the coast, but only 4" to 5" inland. No irrigation in winter. Low to moderate nutrient needs; wood chips, mulch or compost will suffice. May rot in dense soils, especially along the coast. Deadhead in fall. Prune and remove rangy growth in late winter/spring. Easily propagated by root divisions (it spreads by rhizomes) in fall/winter.

Phormium tenax New Zealand flax

Dry to 6" in spring through fall. No irrigation in winter. Will rot in dense wet soils. Do not irrigate in high humidity. Low to moderate nutrient needs; mulch or compost will do. Deadhead in early fall. Pull dead leaves from plant early spring.

Romneya coulteri, **R. trichocalyx** Matilija poppy, Hairy matilija poppy
Southern California natives. Summer dormant and tough. Dry to only 6" in winter and spring, 9" in summer, and 1' in fall. It may not need any irrigation along the coast. Low nutrient needs; nothing more than wood chips or mulch is necessary. Favors the coast and sandy, coarse soils and suffers in clay soils. If looking rangy or woody, prune stalks down to base in late fall. Not easy to establish or propagate, but once established it travels.

Salvia chiapensis Chiapas sage

Not as tough as the other Salvias. Dry to only 4" in spring, 6" in summer and fall. No irrigation in winter. Moderate nutrient needs; yearly mulch and compost will be needed, along with an occasional organic supplement. Tough to grow in full sun inland. Deadhead in winter. If rangy or twiggy looking, cut back to a couple inches late winter/early spring. Easy to propagate by stem cuttings in winter.

Salvia leucantha Mexican bush sage

Dry to 4" in spring, 6" in summer and fall. No irrigation in winter. Low to moderate nutrient needs. In dense soils needs nothing more than wood chips or mulch; in coarse or sandy soil may require a low dose of organic fertilizers, such as a mix of blood and bone meal as well. If the soil is able to breathe, then this subshrub grows well. Deadhead throughout the year. If looking rangy or unproductive, cut nearly to the ground in late summer/early fall along the coast; in late winter/early spring inland. Can propagate from root divisions.

Salvia spathacea Hummingbird sage

Dry to 4" late winter, early spring, 6" in summer, 9" in fall. No irrigation early winter. Low to moderate nutrient needs; yearly mulch and compost are sufficient. Prefers dry shade and coarse soils, and suffers in wet, dense soils. Deadhead in summer. Easy to propagate from offsets and stem cuttings in winter.

Senecio inieraria, S. viravira Dusty miller

Tough plant. Dries to 4" in spring, but 6" to 9" in summer and fall (depending on distance from coast). No irrigation in winter. Moderate nutrient needs; yearly mulch or compost will be needed, and occasionally organic supplements as well. Will rot in dense, clay soils. Pinch or shear in spring to induce bushiness. If looking rangy, cut back to succulent growth in late winter/early spring.

Silene californica California Indian pink

Southern California native. Dry to 6" in late winter, early spring, 9" in summer, and 1' in fall and early winter. Low nutrient needs; just mulch and compost will do. Suffers in dense moist soils. Deadhead after the seeds have set, typically late summer.

Solidago californica California goldenrod

Southern California native that favors a wet spring. Dry to 4" in late winter/early spring, 6" in late spring/early summer, and 9" in late summer, early fall. No irrigation in late fall/early winter. Low to moderate nutrient needs; a layer of mulch and compost will do. Delay deadheading until seeds have set, usually in late fall.

Sphaeralcea spp. Globe mallow

Includes many Southern California natives and a true desert perennial. Dry to 6" spring, to 1' in summer and fall. No irrigation in winter. Low nutrient needs; just wood chips and mulch will be necessary. Suffers along the coast and in wet/humid environments. If rangy or twiggy looking, cut stems down to ground in late winter/early spring. Propagate by young stem cuttings and seed in winter through spring.

Tagetes lemmonii Mexican marigold or Copper Canyon daisy

Dry to 6" spring through fall along the coast, to 4" inland. No irrigation in winter. Low to moderate nutrient needs; compost plus a light organic fertilizer every other year will improve blooms. If the plant is looking old or rangy, prune nearly to base early spring, after the last flower, but before new growth.

Thalictrum fendleri Meadow rue

Southern California native found in woodland environments. Does best if it does not dry to more than 4" spring and summer, 6" in fall. No irrigation in winter. Moderate nutrient needs, but thrives when given a lot of leafy mulch. Deadhead in early fall. Propagation is easy by dividing the plant.

Tulbaghia violacea Society garlic

Dry to 6" spring through fall. Low to moderate nutrient needs; mulch and compost are sufficient. Deadhead in summer. Pull out dead leaves in late winter. If overcrowded, divide late fall/early winter.

***Typha* spp.** Cattail

Some Southern California natives. Warm season. Cattails need constant moisture and are used for bioremediation in urban areas. They will either grow in standing water or saturated soils. They prefer acidic fertile environments. Leafy debris and compost may be needed to establish a colony. Some varieties are aggressive and will need corraling and dividing in late winter/early spring. Plant in spring.

Verbena lilacina Cedros Island verbena or Lilac verbena

Dry to 4" in late winter/early spring, 6" in late spring to early fall. No irrigation in late fall/early winter. Low nutrient needs; wood chips or mulch will do. Pinch or lightly shear in spring for compactness and containment. Can be short-lived.

***Viguiera* spp.** Desert sunflower, Goldeneye

Some Southern California natives. Mostly found in the deserts and scrub communities. Some are monsoon-adapted. Dry to 6" spring and summer. No irrigation fall or winter. Will rot with too much irrigation. Low nutrient needs; nothing more than wood chips or mulch is needed. If looking rangy, shear to 3" in late winter.

***Xanthorrhoea* spp.** Grass tree

Dry to 6" in spring, 9" summer and fall. No irrigation in winter. Low nutrient needs; nothing but wood chips or mulch is needed. A slow grower and fertilizer will not help. Pull dead leaves in late winter, early spring.

Plant Names

Low Growing and Rooting Perennials: Common Names to Botanical

African daisy, Freeway daisy *Osteospermum fruticosum*
 Aster, California *Symphotrichum chilense*
 Basket of gold *Aurina saxatile*
 Beach aster, Sand aster *Lessingia filaginifolia* ‘Silver Carpet’
 Blue-eyed grass *Sisyrinchium bellum*
 Catnip *Nepeta cataria*
 Checkerbloom, Prairie mallow *Sidalcea malviflora*
 Chamomile *Chamaemelum nobile*
 Clover *Trifolium* spp.
 Coral bells or Alum root *Heuchera* spp.
 Coyote mint *Monardella villosa*
 Creeping thyme *Thyme* spp.
 Curry and Licorice plants *Helichryum* spp.
 Dwarf plumbago *Ceratostigma plumbaginoides*
 Dymondia *Dymondia margaretae*
 Gazania *Gazania* hybrids
 Geranium, ivy geranium, Martha Washington *Pelargonium* spp.
 German chamomile *Matricaria recutita*
 Germander sage *Salvia chamaedryoides*
 Ground morning glory *Convolvulus mauritanicus*, *C. sabatius*
 Gumplant *Grindelia hirsutula*
 Hedge nettle, California *Stachys bullata*
 Hooker’s evening primrose *Oenothera elata hookeri*
 Indian mock strawberry *Duchesnea indica*
 Lamb’s ears *Stachys byzantina*
 Lippia *Phyla nodiflora*
 Majorcan, Teucrium or fruity germander *Teucrium cossonii*
 Mexican daisy, Santa Barbara daisy *Erigeron karvinskianus*
 Nasturtium *Tropaeolum* spp.
 Peppermint and spearmint *Mentha x piperita*, *M. spicata*
 Potentilla or cinquefoil *Potentilla* spp.
 Purple heart, Moses in the cradle *Tradescantia pallida*, *P. spathacea*
 Rupture wort *Herniaria glabra*
 Sea pink, Thrift *Armeria* spp.
 Seaside daisy *Erigeron glaucus*
 Sinaloa sage *Salvia sinaloensis*
 Sonoma sage *Salvia sonomensis*

Speedwell, Turkish speedwell, Creeping speedwell *Veronica liwanensis*,
V. repens
 Sundrops *Calylophus berlandieri*, *C. hartwegii*
 Sweet marjoram, oregano *Origanum majorana*, *O. vulgare*
 Tickseed *Coreopsis auriculata* 'Nana'
 Trailing mallow *Malvastrum lateritium*
 Wild strawberry, sand strawberry *Fragaria chiloensis*, *F. californica*
 Verbena, moss verbena *Verbena peruviana*, *V. pulchella gracilior*, *V. tenuisecta*
 Yarrow *Achillea* spp.
 Yerba buena (Yerba yuena) *Clinopodium* (*Satureja*) *douglasii*

Larger Perennials: Common Names to Botanical

Angel's hair *Artemisia schmidtiana*
 Breath of heaven *Coleonema* spp.
 Buckwheat *Eriogonum* spp.
 California fuchsia or zauschneria *Epilobium* (*Zauschneria*) *canum*
 California goldenrod *Solidago californica*
 California Indian pink *Silene californica*
 California mugwort *Artemisia douglasiana*
 Cattail *Typha* spp.
 Day lily *Hemerocallis* hybrids
 Deerweed *Lotus scoparius*
 Desert sunflower, Goldeneye *Viguiera* spp.
 Dusty miller *Senecio inieraria*, *S. viravira*
 Flax lily *Dianella tasmanica*
 Flax, New Zealand *Phormium tenax*
 Fortnight lily, African iris *Diets* spp.
 Gaura *Gaura lindheimeri*
 Geranium, scented *Pelargonium*
 Globe mallow *Sphaeralcea* spp.
 Grass palm *Cordyline australis*
 Grass tree *Xanthorrhoea* spp.
 Iris, Pacific coastal *Iris douglasiana*, *I.* 'Pacific Coast Iris'
 Kangaroo paws *Anigozanthos* spp.
 Lily of the Nile *Agapanthus africanus*, *A. orientalis*
 Matilija poppy, hairy matilija poppy *Romneya coulteri*, *trichocalyx*
 Mat rush *Lomandra* spp.
 Meadow rue *Thalictrum fendleri*
 Mediterranean and gopher spurge *Euphorbia characias*, *E. rigida*
 Mexican bush sage *Salvia leucantha*
 Mexican grass tree, Desert Spoon *Dasyilirion* spp.

Mexican lobelia *Lobelia laxiflora*
 Mexican marigold or Copper Canyon daisy *Tagetes lemmonii*
 Milkweed *Asclepias* spp.
 Penstemon: scarlet bugler, firecracker, foothill, desert, showy *Penstemon centranthifolius*, *eatonii*, *heterophyllus*, *pseudospectabilis*, *spectabilis*
 Red hot poker, Torch Lily *Kniphofia* spp.
 Rush, California grey *Juncus patens*
 Rush, Mexican *Juncus mexicanus*
 Sage, hummingbird *Salvia spathacea*
 Sage, Chiapas *Salvia chiapensis*
 Sea lavender *Limonium perezii*
 Society garlic *Tulbaghia violacea*
 Spurge, Mediterranean and gopher *Euphorbia characias*, *E. rigida*
 Turkish sage *Phlomis russeliana*
 Verbena, Cedros Island or lilac verbena *Verbena lilacina*

Low Growing and Rooting Perennials: Botanical Names to Common

Achillea spp. Yarrow
Armeria spp. Sea pink, thrift
Aurina saxatile Basket of gold
Calylophus berlandieri, *C. hartwegii* Sundrops
Ceratostigma plumbaginoides Dwarf plumbago
Chamaemelum nobile Chamomile
Clinopodium (Satureja) douglasii Yerba buena (Yerba yuena)
Convolvulus mauritanicus, *C. sabatius* Ground morning glory
Coreopsis auriculata 'Nana' Tickseed
Duchesnea indica Indian mock strawberry
Dymondia margaretae Dymondia
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Gazania hybrids Gazania
Grindelia hirsutula Gumplant
Helichryum spp. Curry and licorice plants
Herniaria glabra Rupture wort
Heuchera spp. Coral bells or alum root
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Malvastrum lateritium Trailing mallow
Matricaria recutita German chamomile
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Monardella villosa Coyote mint

Monardella odoratissima Mountain pennyroyal
Nepeta cataria Catnip
Oenothera elata hookeri Hooker's evening primrose
Origanum majorana, *O. vulgare* Sweet marjoram, oregano
Osteospermum fruticosum African daisy, freeway daisy
Pelargonium spp. Common geranium, ivy geranium, Martha
 Washington
Phyla nodiflora Lippia
Potentilla spp. Potentilla, cinquefoil
Salvia chamaedryoides Germander sage
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Salvia sonomensis Sonoma sage
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Sisyrinchium bellum Blue-eyed grass
Stachys bullata California hedge nettle
Stachys byzantina Lamb's ears
Symphotrichum chilense California aster
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Thyme spp. Creeping thyme
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Trifolium spp. Clover
Tropaeolum spp. Nasturtium
Verbena peruviana, *V. pulchella gracilior*, *V. tenuisecta* Verbena, moss
 verbena
Veronica liwanensis, *V. repens* Turkish speedwell, creeping speedwell

Larger Perennials: Botanical Names to Common

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Artemisia douglasiana California mugwort
Artemisia schmidtiana Angel's hair
Asclepias spp. Milkweed
Coleonema spp. Breath of heaven
Cordyline australis Grass palm
Dasyliirion spp. Mexican grass tree, desert spoon
Dianella tasmanica Flax lily
Dietes spp. Fortnight lily, African iris
Epilobium (Zauschneria) canum California fuchsia or zauschneria
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Gaura lindheimeri Gaura

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Juncus mexicanus Rush, Mexican
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