

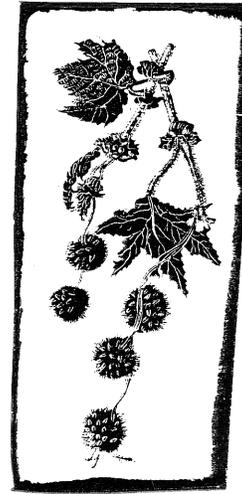
*Cornflower*



*Belted Kingfisher*



*California Sycamore*



# CORNFLOWER FARMS

W I L D L A N D / A G R I C U L T U R E  
C A T A L O G

*Growers of Quality California Native and Water Wise Plants Since 1981*

# OUR PERSPECTIVE

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## Welcome!

Cornflower Farms' "Wildlands / Agriculture Catalog" was created to assist those interested in using our plant materials in wildland restoration and enhancement and agricultural applications. This guide provides useful plant material information on such popular topics as revegetation, drought tolerance, creating wildlife, beneficial insect, butterfly and hummingbird habitat, fire and erosion control, native grasses, windbreaks, biomass as renewable fuel source and biodiversity. Also included is our current price list and order form to make working with us easy.

Cornflower Farms grows over 400 native and ornamental plants. As depicted in this illustration we grow plants that are native to mountain and coastal plant communities and most everything in between. We also grow non-native ornamentals that are well-suited for a variety of landscape applications. Our diversity helps improve and maintain the diversity that is California and it is built on hope that we make life for all that live here just a little bit better.

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## HOW TO USE THIS GUIDE

Descriptions for most of the plant materials grown by Cornflower Farms can be found in the reference, we've denoted five desirable attributes with the symbols shown at right.

For more information about these plant attributes and additional plant listings, please refer to our specialty sections (*Revegetation and Restoration*, *Beneficial Insect Plants*, *Native Grasses*, etc.).

To keep current with new nomenclature while avoiding confusion, we have included the following notations:

- All recently revised plant names will be in parentheses behind the familiar names used to date.  
Example: *Stipa pulchra* (*Nassella pulchra*)
- All important synonyms will be noted.  
Example: *Cornus stolonifera* (syn. *C. sericea*)

Toward the back of this guide helpful information on placing an order, plant pick-up, delivery and care, planting suggestions and successful establishment tips can be found. Also, "The Bookshelf" describes several references we and others have found useful in the subject areas touched-upon in this catalog.

### PLANT SYMBOLS



CALIFORNIA NATIVE



WATER WISE PLANT



BENEFICIAL INSECT PLANT



HUMMINGBIRD PLANT



BUTTERFLY PLANT

# REVEGETATION AND RESTORATION

Revegetation and restoration materials described here are native plants commonly used to replant or enhance areas that have been degraded or destroyed by human activity. Materials can be obtained from us in one of two ways:

- Using stock on-hand collected from locations throughout Northern and Central California, we can usually provide you with a collection site that is suitable for your project application. Relatively small orders can usually be filled with these materials.
- We collect and propagate site-specific materials on a contract grown basis. Seeds and cuttings from existing sources on or near your project site are used, with target numbers and delivery dates for each species established in advance.

In both instances, we carefully follow very precise collection and computer tracking procedures so that you receive the best materials possible. Please refer to *Planting and Irrigation Guidelines* (page --) to help you with your project planning.

## About Containers

Cornflower Farms offers plant materials in a wide range of container designs and sizes to meet your specific needs. In most cases, our revegetation materials are grown in special containers instead of conventional nursery containers to enhance out-planting success. These unconventional containers are used to promote deep and straight root systems, improving plant survival. Most of these containers have some or all of the following features:

- A pot depth that is several times larger than pot width.
- Root training ridges to encourage straight, vertical root growth.
- An open bottom to induce air pruning of roots.

These containers help revegetation and restoration projects by keeping circular root growth to a minimum and quickly overcoming the harsh out-planting conditions that generally exist. The revegetation and restoration containers we offer are listed in the table. In this catalog the focus will be on using plug-PL, superstubby-L6, supercell-L8, and treeband containers-TB. Plant material in larger containers; deepots-DP, Treepot 4-T4, treepot 6-T6, treepot 8-T8; are available upon request.

Selection of the best container can be dictated by many factors. One which is often overlooked is timing and potential delays, necessitating holding plant materials in containers longer (sometimes much longer!) than originally anticipated.

Type	Code	Dimensions	Vol./cu.in.
Plug	PL	1 1/4" sq. x 3" long	2
Super Stubby	L6	1 1/2" dia. x 6" long	7
Super Cell	L8	1 1/2" dia. x 8" long	10
Tree Band	TB	2 1/4" sq. x 5" long	20
Deepot	D6	2" dia. x 7" long	16
Deepot	DP	2 1/2" dia. x 10" long	40
TreePot	T4	4" sq. x 14" long	180
TreePot	T6	6" sq. x 16" long	400
TreePot	T8	8" sq. x 18" long	550

Although changing plant material from one container size or design to another is often possible, it increases plant material cost and often results in less than optimum growth.

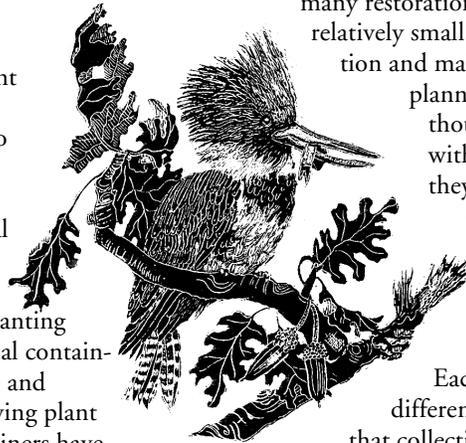
Generally speaking, plant material cost for many restoration and revegetation projects is relatively small compared to design, installation and maintenance costs. When

planning, be sure to give some extra thought to the "what ifs" associated with your project, and the impact they may have on the type and size of container you select. Feel free to ask us about our experience with each container type and the advantages of each.

Each size and species is priced differently. Also, please keep in mind that collection fees, if any, will be billed separately. Inquire as early as possible to determine plant material costs for your project. Please note, we now offer certain willow and poplar species as whips and poles for direct sticking at the project site.

## Revegetation Plant Listings

Each of the following plant materials listed is described briefly in terms of form, general location and plant community where commonly found, and wildlife uses. In addition to the materials listed below, we can grow many less common species from a wide variety of plant communities. Please inquire about our special contract growing capabilities.



***Acer macrophyllum* / big-leaf maple**

Deciduous riparian shade tree growing 30-90 ft. high. This coastal and inland native is found in moist streambanks and canyons below 5000'. 🌿

***Acer negundo* var. *californicum* / California box elder**

Deciduous tree, 40-60 ft. high, native to moist streambanks and valleys below 6000'. Found statewide. 🌿

***Adenostoma fasciculatum* / chamise**

Evergreen, resinous shrub growing from 2-12 ft. high with linear, needle-like leaves. Widely distributed shrub in the dry chaparral communities along the Coast Ranges and lower Sierra Nevada foothills below 5000'. 🌿

***Aesculus californica* / California buckeye**

Multi-stemmed shrub or small tree reaching 10-20 ft. tall and 10 ft. wide. Commonly found on dry slopes and in canyons below 4000' in woodland communities along the Coast Ranges and Sierra Nevada foothills. 🌿

***Alnus incana* ssp. *tenuifolia* / mountain alder**

Riparian shrub or small tree growing to 9 ft. or more. Found along streams below 5000' in Chaparral and Foothill Woodland communities. 🌿

***Alnus rhombifolia* / white alder**

Fast growing deciduous riparian tree growing 30-90 ft. high. Found statewide along stream banks below 5000'. 🌿

***Amelanchier alnifolia* (syn. *A. pallida*) / western serviceberry**

Hardy deciduous shrub or small tree 3-9 ft. high, attractive all season. Numerous 1/2 in. white flowers with twisted petals followed by edible purple fruits like tiny apples. Small, rounded, blue-green leaves turn yellow, red or purple in fall. Full sun or part shade, tolerates drought, heat or cold. Blooms April-June on dry, gravelly slopes and flats below 11,000 ft. in many plant communities of the Coast Ranges and Sierra Nevada. 🌿

***Anemopsis californica* / yerba mansa**

Hardy perennial to 2 ft. high, erect, clumping. Large and showy 3 in. wide white coneflowers aging to purplish-red, long-blooming. Large, woolly ovate leaves 7 in. long. Stolonerous, often forming large colonies. Blooms Mar.-Sept in wet, sometimes alkaline places below 6500 ft. in many plant communities of California, Nevada, southwest U.S. 🌿

***Arbutus menziesii* / madrone**

Evergreen tree ranging from 30-60 ft. high. Has showy reddish bark, pinkish spring flowers and red berries in fall. Wooded slopes and canyons below 5000'. 🌿

***Arctostaphylos nevadensis* / pinemat manzanita**

Low, prostrate evergreen shrub found in moist places and dry wooded slopes anywhere from 5000-10,000' elevation in the northern Sierra Nevadas and Coast Ranges. 🌿

***Arctostaphylos patula* / greenleaf manzanita**

Evergreen multi-branched shrub 3-7 ft. high commonly found in open pine forests from 2000-5000' occasionally to 9000' It occurs in the Sierra Nevada Mountains from Kern County north and the Coast Ranges from Lake County north. 🌿

***Arctostaphylos viscida* / whiteleaf manzanita**

Tough upright manzanita to 5 ft. high and 3-4 ft. wide with large, rounded, light green leaves found on dry slopes in Chaparral and Foothill Woodlands in northern Sierra Nevada and north Coast Ranges from 500-5000'. 🌿

***Aristolochia californica* / California Dutchman's pipe**

Deciduous vine needing shade and moisture along streambanks at or below 1500' in Foothill Woodlands, Chaparral, and Mixed Evergreen Forests. Found in the north Coast Ranges and Sierra Nevada Foothills from Sacramento County north through the valley. 🌿

***Artemisia californica* / coastal sagebrush**

Aromatic gray-green shrub found on dry slopes below 2500' from Napa County south in Coastal Sage Scrub and Coastal Strand communities. 🌿

***Artemisia douglasiana* / Douglas mugwort**

Riparian perennial with aromatic gray-green foliage found on coast and inland foothills to 6000'. 🌿

***Artemisia tridentata* / big sagebrush**

Evergreen shrub 1 1/2-9 ft. high, usually 2-6 ft., rounded. Pungently aromatic, densely branched, with silvery-gray, lobed leaves 3/4 in. long. Slender spikes of tiny creamy-yellow flowers. Important browse and revegetation species, evergreen shrub for dry soil. Full sun, tolerates drought, heat, cold, wind, poor soil. Blooms Aug-Oct on dry slopes and plains 1500-10,600 ft. in several plant communities of the Sierra Nevada, Great Basin, Modoc and Siskiyou counties, southern deserts. 🌿

***Atriplex lentiformis* / quail bush**

Densely branched deciduous shrub with spines growing 3-9 ft. high and 6-12 ft. wide with gray-green leaves and yellow summer flowers. Found in alkaline places below 2000' along interior valleys and in deserts. 🌿

***Atriplex lentiformis* ssp. *breweri* (*A. lentiformis*, big leaf form) / Brewer saltbush**

Semi-deciduous shrub similar to *A. lentiformis* but without spines, found in saline places in valley grasslands and Coastal Sage Scrub. 🌿

***Aquilegia formosa* / western columbine**

Perennial for sun or shade areas growing 1 ft. tall and wide with red to yellow flowers that bloom April to September. 🌿

***Baccharis douglasii* / marsh baccharis**

Evergreen multi-stemmed shrub to 3-6 ft. high along streams and moist ground below 1500' elevation. Found statewide, but more common along coast. 🌿

***Baccharis pilularis* / chaparral broom**

Tough woody perennial growing 4-6 ft. high and wide with white flowers in fall that reseed readily. Found below 2000' in the Coastal Scrub, Chaparral, and Foothill Woodland communities. 🌿

***Baccharis viminea* (*B. salicifolia*) / mule fat**

Erect riparian shrub growing 6-10 ft. tall with long, dark green foliage. Common in moist areas along waterways, yet also does well in drought conditions. Found from sea level to about 1500' elevation. 🌿

***Calocedrus decurrens* / incense cedar**

Evergreen trees reaching 75-100 ft. tall. Adaptable to many climates and tolerable of high summer temperatures and poor soils. Found in forest communities from 2400-8200' elevation statewide. 🌿💧

***Carpenteria californica* / bush-anemone**

Evergreen native shrub to 6 ft. tall and as wide. Leaves are 3-5 in. and a glossy green. In late spring it is covered with abundant white clusters of fragrant flowers. 🌿💧

***Ceanothus cordulatus* / whitethorn ceanothus**

Spiny evergreen shrub growing 2-5 ft. high. Commonly found on rocky ridges or open pine forests from 3500-9000' in mountain communities. 🌿💧🦋🦋

***Ceanothus cuneatus* / buckbrush**

Upright chaparral shrub to 8 ft. found on dry mountain ridges, slopes and valleys at 300-4000' elevations. 🌿💧🦋🦋

***Ceanothus integerrimus* / deerbrush ceanothus**

Semi-deciduous to deciduous mountain shrub 3-12 ft. high, found at 1000-7000' elevations commonly along the Ponderosa Pine Belt. 🌿💧🦋🦋

***Ceanothus lemmonii* / Lemmon's ceanothus**

Spreading evergreen shrub to 1 1/2-3 ft. wide with gray bark. Flower clusters 1" long, pale blue, April-May. Occurs in open wooded slopes in the Sierra foothills and north to Shasta County at 1200-3500' elevation. 🌿💧🦋🦋

***Ceanothus prostratus* / Mahala mat/squaw carpet**

Evergreen, prostrate shrub spreading 6-8 ft. wide and found under the pines at high elevations from 2100-7800'. 🌿💧🦋🦋

***Ceanothus thyrsiflorus* / blueblossom**

Evergreen shrub, variable in size from 4-20 ft. high, found from sea level to 1500' in mixed evergreen and redwood forests of the Coast Ranges. 🌿💧🦋🦋

***Ceanothus velutinus* / snowbush**

Evergreen shrub 2-5 ft. high found on wooded mountain slopes at 3500-10,000' elevation in the Sierra Nevada mountains. 🌿💧🦋🦋

***Cephalanthus occidentalis* var. *californicus* / buttonbush, button-willow**

Riparian shrub growing 3-12 ft. high and found along streambeds at low elevations of the Sacramento and San Joaquin valleys. Hummingbirds like. 🌿🦋

***Cercis occidentalis* / western redbud**

Deciduous large shrub from 6-20 ft. tall and 10-15 ft. wide. Tolerant of many soil types, drought, and oak root fungus. Found statewide in the foothills below 4500' elevation in chaparral and woodland communities. 🌿💧🦋

***Cercocarpus betuloides* / mountain mahogany**

Evergreen shrub 5-12 ft. high or small tree to 20 ft. with loose, spreading habit. Found statewide at elevations of 500-4000' in chaparral and woodland communities. Very tolerant of drought situations and is considered a good browse plant. 🌿💧

***Cercocarpus ledifolius* / curl-leaf mountain mahogany**

Hardy evergreen shrub or small tree 6-18 ft. high, open. Showy summer-fall display of feathery tailed seed that catch the sunlight. Small, clustered leaves are deep green, leathery, with curled-under edges. Full sun, tolerates drought, wind, heat or cold, poor soils. Occurs on dry, rocky slopes 4000-10,500 ft. mostly on the east slope of the Sierra Nevada and throughout the western U.S. 🌿💧

***Chrysolepsis sempervirens* (syn. *Castanopsis sempervirens*) / bush chinquapin**

Hardy evergreen compact shrub 3-6 ft. high. Luxurious, deep green rhododendron-like leaves. Attractive brownish-gold burr-like fruit in large clusters resemble chestnuts. Full sun or part shade, tolerates drought, cold, wind. Found on dry, rocky slopes and ridges 2500-11,000 ft. in Montane Coniferous forests of the Coast Ranges and Sierra Nevada. 🌿💧🦋

***Chrysothamnus nauseosus* / gray rabbitbrush**

Native shrub 1-7ft. tall. White-gray wooly hairs densely cover stems and leaves. plant has a heavy scent. Common steppe shrub sometimes mistaken as sage brush.. Flowers bloom late summer; yellow disk flowers appear in showy clusters in small heads. 🌿💧🦋

***Clematis lasiantha* / chaparral virgin's bower**

Deciduous small vine 12-15 ft. high. Attractive clusters of 1 in. wide white flowers with many long stamens followed by billowy clusters of feathery-tailed seeds that catch the sunlight, light-green compound leaves. Full sun or light shade, tolerates drought, heat. An interesting small vine for fences, arbors. Blooms Mar.-June in Chaparral below 6000 ft. in the Coast Ranges and Sierra Nevada. 🌿💧🦋

***Clematis ligusticifolia* / western clematis**

Woody deciduous vine found statewide in valleys, foothills, and mountains throughout the Coast Ranges, the Sierra Nevada and in Southern California. 🌿💧🦋

***Cornus nuttallii* / western dogwood**

Deciduous mountain shrub or tree reaching 30 ft. high at about 6000' elevation. Common in the Sierra Nevada and north Coast Ranges. Prefers good drainage and infrequent summer watering. 🌿

***Cornus sessilis* / blackfruit dogwood**

Deciduous shrub 10-20 ft. high found in cool, shady, moist areas at 1800-4000' elevation in Northern California foothills and mountains. 🌿

***Cornus stolonifera* / redbud dogwood**

Deciduous multi-stemmed woodland shrub that gets 15 ft. high and is commonly found in northern California below 9000' elevation in moist, shady locations. 🌿

***Corylus cornuta* var. *californica* / western hazelnut**

Deciduous shrub with open, multistemmed growth from 5-10 ft. high. Found in moist wooded canyons in the foothills. Flowers January to April, forms hazelnuts. 🌿

***Mimulus aurantiacus* (*Diplacus aurantiacus*) / golden sticky monkeyflower**

Erect shrub 2-4 ft. tall favoring dry hills and canyon slopes in the Sierra Nevada foothills and the central Coast Ranges. 🌿💧🦋

***Dudleya cymosa* / liveforever**

Perennial with wide pointed fleshy leaves 2-6 in long in a basal clump. Flowers are borne on 1 ft. long stems and are bright yellow with reddish petals about 1/2 in. long. Found in the pinebelt up to 9,000 ft. from San Bernadino mountains north. 🌿💧🦋

***Erigeron glaucus* / beach aster**

Evergreen perennial 6-8 in. high, basal tufts. Numerous 1 1/2-2 in. lavender daisies with nearly 100 petals each give flowers a frilly, fine-textured look. Flowers bloom Apr-Aug on stout stems above neat basal clumps of spoon-shaped leaves. Full sun, part shade inland, tolerates drought and wind near the coast. ☿☿☿

***Eriogonum fasciculatum* var. *foliolosum* / California buckwheat**

Coastal chaparral evergreen shrub 1-4 ft. high tolerating little to no water on dry slopes and canyons. Found in many plant communities in many locations statewide. Good for erosion control on slopes. ☿☿☿☿

***Fraxinus latifolia* / Oregon ash**

Deciduous riparian trees reaching 50-80 ft. high growing along streams or in valleys from sea level to 5500' elevation. Found in the northern Coast Ranges and west side base of the northern Sierra Nevada. ☿☿

***Fremontodendron californica* / California flannel bush**

Fast growing evergreen shrub to 15-20 ft. tall. Leaves 3 lobed and a mass of 3" yellow flowers in spring and early summer. Needs good drainage. ☿☿☿

***Fremontodendron californicum* ssp. *decumbens* / Pine Hill flannel bush**

Evergreen shrub to 3 ft. high, sprawling to 6-12 ft. wide, densely branched. Many waxy orange to orange-red flowers 1-1/4 in. wide. Felty, dark green leaves are more deeply lobed than *F. californica*. Excellent large scale ground cover for dry, well-drained soils. Rare, occurring in scattered locations in El Dorado, Nevada and Yuba counties. ☿☿

***Gaultheria shallon* / salal**

Native coastal evergreen shrub bearing pinkish flowers in spring. Given full sun and poor, dry soil, it grows to 2 ft. Shaded plants in rich soil reach 4-10 ft. ☿

***Garrya elliptica* / coast silk-tassel**

Evergreen shrub 8-15 ft. high, erect. Curious and beautiful clustered flower tassels 6-8 in. long, yellowish-green, drape gracefully from the ends of branches in winter. Shining, dark green, wavy-edged 2 1/2 in. long leaves. Excellent foliage plant, winter interest. Full sun to part shade, tolerates drought, heat, wind, needs moisture inland. Occurs on dry slopes and ridges below 2000 ft. in several plant communities of the outer Coast Ranges. ☿☿

***Helenium bigelovii* / Bigelow's sneezeweed**

Hardy perennial 2-3 ft. high. Showy deep yellow coneflowers with large, almost ball-shaped, golden center cones, drooping petals, long bright green lance-shaped leaves, forming many-flowered clumps. Full sun, moist soil, blooms June-Sept. ☿☿☿

***Heteromeles arbutifolia* / toyon**

Evergreen shrub 8-15 ft. high or small tree to 25 ft. Found statewide in the chaparral communities on dry, rocky mountain slopes, canyon bottoms, and foothills below 4000' elevation. Tolerates sun or partial shade, heat, smog, wind, and heavy or light soils. ☿☿☿☿

***Hibiscus californicus* / California hibiscus (*H. lasiocarpus*, Californian form)**

This plant is found on moist banks near waterways and has erect basal stems that grow 3-6 ft. tall and wide. ☿☿

***Holodiscus discolor* / ocean spray/cream bush**

Native deciduous shrub 2-5 ft. tall in dry climates and up to 10 ft. in moist rich soils. The dark green leaves are triangular and toothed. Flowers occur at the tips of branches in nodding clusters of many creamy white flowers. Native to the coast ranges and the Sierra Nevada. ☿☿☿

***Holodiscus microphyllus* / rock spiraea**

Low native deciduous shrub growing in rock outcroppings in the higher elevations of the Sierra Nevada. Small leaves are intermixed with white flowers on the branches. ☿☿☿

***Iris douglasiana* / Douglas Iris**

Evergreen perennial for sun or shade with blue-violet spring flowers. ☿☿☿

***Iris missouriensis* / blue flag iris**

Hardy perennial to 2 1/2 ft. high, tufted, clump-forming. Western native beardless iris with 2-3 in. wide, pastel blue flowers, darker veined falls with a yellow blaze. Narrow, grass-like leaves are light blue-green. Sun or light shade with moisture, tolerates cold, boggy soils. ☿☿☿

***Juglans californica* var. *hindsii* / Northern California black walnut**

Deciduous tree 45-75 ft. tall. Produces walnuts. Found in canyons and valleys 75-600 ft. elevation. ☿☿

***Lilium pardalinum* / leopard lily**

Vigorous perennial bulb that is hardy to 10F. Has smooth strap-shaped leaves and early summer flowers that are red and orange spotted with purple. The flower stalk can often reach 4-5 ft. high. ☿☿☿

***Linium lewisii* / western blue flax**

Hardy native perennial 1/2-2 ft. high. Numerous 1 in. sky-blue petaled flowers on slender arching stems with densely set, small, linear blue green leaves. Full sun or light shade, tolerates drought, wind, heat or cold. Blooms May to Sept. ☿☿☿

***Lonicera hispidula* var. *vacillans* pink wild honeysuckle**

Evergreen climbing shrub or vine 6-20 ft. long found statewide in the lower foothills of the Coast Ranges and the Sierra Nevada in canyons and along streams. ☿☿

***Lupinus albifrons* / bush lupine**

Evergreen shrub to 5 ft. tall common among dry hillsides and canyons of the Coast Ranges and Sierra Nevada foothills. ☿☿☿☿

***Lupinus polyphyllus* ssp. *superbus* / streamside lupine**

Hardy perennial 2-5 ft. high, bushy, erect. Blue sweetpea-shaped flowers in long, showy clusters, attractive palmately compound leaves. Vigorous, for full sun or light shade with some water, blooms May-July. ☿☿☿☿

***Mahonia aquifolium* / Oregon grape**

Hardy native evergreen shrub 3-6 ft. high, erect, branching, showy, lemon-yellow flowers in nodding clusters 2-3 in. long, followed by blue berries that attract birds. Leathery glossy-green 4-8 in. compound leaves, spiny toothed leaflets. Sun or part shade, tolerates drought, heat, cold. Blooms Mar-May on wooded slopes below 7,000 ft. in conifer forests throughout the NW. ☿☿

***Mahonia repens* / creeping mahonia**

Evergreen native groundcover spreading to 1ft. high and 3 ft. wide. Glossy compound foliage is topped with yellow clusters of flowers in the spring and blue berries in summer fall. Full sun or shade. 🌱💧🦋

***Mimulus bifidus* / Sierra bush monkeyflower**

Hardy sub-shrub 1-2 ft. high, mounding. Large, creamy-peach snapdragon-like flowers, lavishly produced over mounds of small dark green leaves. Sun or light shade, tolerates drought, heat, cold, summer water keeps foliage looking it's best. Much-loved where it blooms Apr-Jul in rocky places, below 5000 ft. in Foothill Woodland, Yellow Pine Forest from Butte to Placer counties. 🌱💧🦋🦋

***Mimulus cardinalis* / scarlet monkeyflower**

Hardy perennial 2-4 ft. high. Large, velvety, cardinal-red tubular flowers take you by surprise. Freely-branched, freely-flowered on erect to semi-erect leafy stems. Full sun or part shade with water, blooms April-Oct. 🌱💧🦋🦋

***Mimulus guttatus* / yellow monkeyflower**

Hardy perennial 1-3 ft. high, erect leafy stalks. Many 1 in. long bright yellow tubular flowers with spotted brown throats, long-blooming. 1 in. long toothed triangular leaves. Spreads by creeping rootstalks to form large colonies in wet places. Full sun or light shade with moisture, tolerates heavy wet soil. 🌱💧🦋🦋

***Mimulus lewisii* / Lewis' monkeyflower**

Hardy perennial 1-2 ft. high, many erect, leafy stems. Large, showy pale pink snapdragon-like flowers with yellow and maroon spotted throats, rivals the best cultivated Monkeyflowers. Full sun or light shade with water, blooms June-Sept. 🌱💧🦋🦋

***Monardella odoratissima*/mountain pennyroyal**

Hardy perennial 9-18 in. high, forming dense clumps. Many 1 in. wide, pincushion-like, dense clusters of small, tubular, vivid purple-red flowers. Fragrant, herb-scented leaves and flowers. Full sun or light shade, tolerant of drought, heat, wind, blooms June-Aug. 🌱💧🦋

***Myrica californica* / Pacific wax myrtle**

Evergreen shrub or tree to 25 ft. high. Found along the coast in moist canyons and seep areas. 🌱

***Penstemon azureus* / azure penstemon**

Hardy perennial 1/2-2 ft. high, lower basal tufts of powdery blue-green leaves. Large, showy, deep blue tubular flowers on many-flowered stems. Full sun, tolerates drought, wind, heat or cold, blooms May-Aug. 🌱💧🦋🦋

***Penstemon heterophyllus*/foothill penstemon**

Hardy perennial 1-3 ft. high, mounding. Big display of showy violet-blue tubular flowers attracts attention. Full sun or light shade, very drought and heat tolerant, blooms June-Sept. 🌱💧🦋🦋

***Penstemon newberryi* / mountain pride**

Hardy evergreen perennial to 1 ft. high, mounding or mat-forming. One of the showiest wildflowers, spectacular display of large, bright pink tubular flowers, a compact shrublet with small, leathery dark-green leaves. Full sun or light shade, tolerates drought, cold, wind. Blooms June-Aug. 🌱💧🦋🦋

***Philadelphus lewisii* / wild mock-orange**

Showy fountain shaped deciduous shrub growing 8-10 ft. with white 2 in. fragrant flowers blooming June to July. Tolerates sun or partial shade. 🌱

***Physocarpus capitatus* / western ninebark**

Deciduous shrub to 8 ft. tall with 2 in. green lobed leaves and dense clusters of white flowers in the spring. Native to the mountains. 🌱💧🦋

***Pinus attenuata* / knobcone pine**

Evergreen tree to 40 ft. high, open, irregular crown. Distinctive tan-colored cones are clustered along branches and persist for years until opened by fire. Airy and fine-textured foliage, slender light green needles. Excellent choice for dry, rocky, shallow and poor soils where other conifers would fail. Occurs on dry, barren or rocky places below 4000 ft. in many plant communities of the Coast Ranges and Sierra Nevada. 🌱💧

***Pinus jeffreyi* / Jeffrey pine**

Tall, evergreen tree from 60-150 ft. high found on dry slopes at 6000-9000' elevation in Yellow Pine Forest and Red Fir Forest communities. 🌱💧

***Pinus lambertiana* / sugar pine**

Hardy evergreen tree to 200 ft. high, open pyramidal crown. Attractive in youth, soft blue green 3-4 in. needles. Beautiful 10-20 in. long cylindrical light brown cones. Full sun or light shade in well-drained soil, tolerates drought. Occurs at 2500-9000 ft. in Yellow Pine and Red Fir forests of the Sierra Nevada. 🌱💧

***Pinus monophylla* / one-leaf pinyon**

Hardy evergreen tree 10-25 ft. high. Bushy, round-headed tree good for rock gardens, bonsai or as a large shrub. Fragrant, blue-green 1-1/2 in. needles, attractive small cones with edible pinenuts. Full sun with good drainage, tolerates drought, heat, cold, wind. Found on dry, rocky slopes and ridges 3500-9000 ft. in the southern mountains, east slope of the Sierra Nevada, east to Utah. 🌱💧

***Pinus muricata* / bishop pine**

Evergreen tree 45-75 ft. high, wide-spreading pyramidal to flat-topped crown. Thick spreading branches of dense forest-green needles and whorls of hump-backed cones. Picturesque with age, handsome in youth. Fast-growing, for full sun on the coast, light shade inland, tolerates wind, salt air, excellent windbreak tree. Occurs on low hills and flats in Closed-Cone Pine forests near the coast from Humboldt to Santa Barbara counties. 🌱💧

***Pinus murrayana* / lodgepole pine**

Hardy evergreen tree 45-120 ft. high, slender, open, attractive in youth. Deep green 2 in. needles, attractive small cones that persist several years, responds well to training. Full sun, drought tolerant, most flood tolerant of western conifers, good for wet or dry gravelly soils along streambanks, floodplains. Found at 5000-11,000 ft. throughout western U.S.. 🌱💧

***Pinus ponderosa* / ponderosa pine, yellow pine**

Large evergreen tree that can eventually reach 100 ft. or more. Found at 2000-8500' elevation in Yellow Pine Forests in mountains of southern California to north Coast Ranges and in Sierra Nevada. 🌱💧

***Pinus sabiniana* / gray pine/Digger pine**

Fast growing woodland conifer to 40-50 ft. high. Tolerates heat, smog, drought, and moist conditions. Found inland statewide below 4500' elevation. 🌱💧

***Platanus racemosa* / California sycamore**

Fast growing deciduous tree reaching 50-100 ft. Tolerant of heat, wind, moist soils. 🌱🦋

***Populus balsamitera* ssp. *trichocarpa* / black cottonwood**

Hardy deciduous tree 100-180 ft. high, broad open crown. Shimmering dark green, narrowly triangular leaves with silver undersides turn golden in the fall. large, balsam-scented buds and grayish-white branches are attractive in winter. Handsome, fast-growing windbreak tree. Full sun, average moisture, tolerate wind, cold. Occurs along streams below 9000 ft. in many plant communities throughout the western United States. ☿

***Populus fremontii* / Fremont cottonwood**

Fast growing deciduous riparian trees reaching 40-60 ft. high. Found below 4000' in foothills or open plains. Does fine with little water or in flooded areas. ☿

***Potentilla glandulosa* / sticky cinquefoil**

Hardy perennial 18-30 in. high. Pale lemon-yellow buttercup-like flowers on wiry stems above attractive compound leaves, burgundy fall color. Full sun or part shade with some water, blooms May-July. ☿☿☿

***Prunus emarginata* / bitter cherry**

Deciduous riparian shrub 4-12 ft. high found on mountain ridges, streams banks, and moist slopes from 500-9000' elevation. Found in Sierra Nevada, Coast Ranges, and Southern California mountains. ☿☿

***Prunus ilicifolia* / hollyleaf cherry**

Evergreen shrub or small tree to 20 ft. high found on dry hills and foothills in chaparral and woodland communities below 5000'. ☿☿☿

***Prunus virginiana* var. *demissa* / western chokecherry**

Deciduous shrub 3-8 ft. found statewide along lower mountains commonly in moist places. ☿☿

***Pseudotsuga menziesii* / Douglas-fir**

Hardy evergreen tree to 200 ft. high, pyramidal crown. Soft, blue-green 1 in. needles are densely set along semi-pendulous branchlets. New growth is a beautiful apple-green. Handsome ornamental screen tree. Full sun or light shade, tolerates drought, heat, cold. Occurs on moist or dry slopes below 5000 ft. in many forest communities of the Coast Ranges and Sierra Nevada. ☿

***Purshia tridentata* / antelope bitterbrush**

Hardy semi-evergreen shrub 1-6 ft. high, usually smaller, compact, mounding. Many small creamy-yellow flowers in spring, small grayish leaves are wedge-shaped and crowded along stems. Important browse and revegetation plant. Full sun or light shade, tolerates drought, wind, heat or cold, poor soils. Blooms May-July on dry slopes and flats 3000-10,000 ft. in Sagebrush Scrub throughout the drier regions of the western U.S. ☿☿☿

***Quercus agrifolia* / coast live oak**

Coastal evergreen round-headed tree 30-60 ft. high and wide found in coastal chaparral and woodland communities below 3000' elevation. Grows well from the coast to interior valleys. ☿☿☿☿

***Quercus chrysolepis* / canyon live oak**

Evergreen tree from 30-40 ft. high found in inland woodland communities in the foothills and mountains below 6500' elevation. ☿☿☿☿

***Quercus douglasii* / blue oak**

Inland deciduous tree having slow growth to 30-50 ft. high located in foothills and mountains below 3500' elevation in woodland communities. ☿☿☿☿

***Quercus dumosa* / California scrub oak (*Q. berberidifolia*)**

Evergreen, drought tolerant shrub growing 5-10 ft. in chaparral and woodland communities below 5000' elevation on dry, rocky slopes. ☿☿☿☿

***Quercus durata* / leather oak**

Evergreen shrub 3-9 ft. high, compact, mounding. Leathery, convex, small rounded leaves are densely set on twigs. Small, light-colored acorns attractive in fall. Full sun, tolerates drought, heat, serpentine soils, good for erosion control. Found in Chaparral and Foothill Woodland of the Coast Ranges and Sierra Nevada. ☿☿☿☿

***Quercus garryana* / Oregon white oak**

Coastal deciduous tree 25-50 ft. high found between 1000-5000' elevation. ☿☿☿☿

***Quercus kelloggii* / California black oak**

Inland deciduous tree from 20-60 ft. high found in woodland and forest communities between 1500-8000' elevation on mountain slopes and valleys. ☿☿☿☿

***Quercus lobata* / valley oak**

Large inland deciduous tree from 60-80 ft. tall and wide found statewide in woodland and grassland communities below 2000' elevation. ☿☿☿☿

***Quercus vaccinifolia* / huckleberry oak**

Evergreen shrub, low growing to 2 ft. with spreading branches. Leaves are grayish green with smooth edges. Native to higher elevations 3000-9000 ft. ☿☿☿☿

***Quercus wislizenii* / interior live oak**

Inland evergreen tree from 30-70 ft. high forming a broad rounded crown. Found in valleys and slopes below 5000' elevation mostly in Foothill Woodlands and lower Sierra Nevada and inner Coast Ranges. ☿☿☿☿

***Rhamnus californica* / coffeeberry**

Evergreen shrub from 12-15 ft. high found in chaparral and coastal scrub communities statewide. ☿☿☿☿

***Rhamnus californica* ssp. *tomentella* / coffeeberry (*R. tomentella*)**

Evergreen shrub reaching 12-15 ft. high inland and found on dry flats and rocky ridges as well as moist slopes in chaparral and woodland communities below 3500'. Tolerates sun or partial shade in all soil types. ☿☿☿☿

***Rhamnus crocea* ssp. *ilicifolia* (*R. ilicifolia*) / holly-leaf redberry**

Evergreen shrub or tree to 15 ft. high found statewide below 5000' elevation. Good for dry banks and tolerant of full sun and drought. ☿☿☿☿

***Rhamnus purshiana* / cáscara sagrada**

Hardy deciduous shrub or small tree 9-36 ft. high, usually smaller, erect, open branching. Large, shining dark green leaves tufted at ends of branches, turn yellow in fall. Small clusters of tiny white flowers followed by black, berry-like fruit. Part shade or full sun with some water. Occurs in moist places below 5000 ft. in conifer forests of the Sierra Nevada and Coast Ranges. ☿☿☿☿

***Rhamnus rubra* / Sierra coffeeberry**

Hardy deciduous shrub 3-5 ft. high, compact. Small umbels of tiny white flowers followed by handsome, black 1/2 in. fruit. Elliptic, blue-green leaves turn yellow in fall. Full sun or light shade, tolerates drought, cold, wind. Found on dry slopes 2000-7000 ft. in Montane Coniferous forests from Siskiyou County to Calaveras County. ☿☿☿☿

***Rhododendron occidentale* / western azalea**

Deciduous shrub growing 6-10 ft. found along stream banks and in moist places in woodland communities. Prefers shade and is hardy to -5°F. 🌿💧🌿

***Rhus diversiloba* / poison oak  
(*Toxicodendron diversilobum*)**

Deciduous shrub 1-6 ft. high found statewide from sea level to 5000' elevation in open woodland and chaparral communities. Good wildlife food. Causes dermatitis. 🌿💧

***Rhus trilobata* / skunk bush**

Hardy deciduous shrub 2 1/2-5 ft. high, diffusely branched, spreading. 1-3 in. three-parted leaves turn yellow, red and purple in fall, even in the Central Valley. Striking scarlet-red, waxy berries in summer. Fall color shrub or large scale ground cover for dry soils. Full sun or light shade, tolerates drought, heat, cold, wind. Blooms small clusters of tiny yellow flowers in Apr-May, in low spots, thickets and wooded slopes below 5000 ft. in many plant communities of cismontane California. 🌿💧

***Ribes aureum* / mountain golden currant**

Hardy deciduous shrub 3-6 ft. high, erect, arching. Pretty 1-2 1/2 in. long clusters of small, bright yellow, tubular flowers have a spicy fragrance. Showy, bright red translucent berries in fall attract birds. Rounded, lobed, light green leaves turn rich red in fall. Easy-to-grow flowering or fall color shrub, hedge. Full sun or light shade, tolerates heat, cold, wind, alkaline soil. Blooms Apr-May on moist banks 2500-7800 ft. in Sagebrush Scrub to Lodgepole Forest, eastern side of the Sierra Nevada to Modoc and Siskiyou counties. (*R. a. gracillimum* is a less cold hardy variety from lower elevations). 🌿💧🌿

***Ribes aureum* var. *gracillimum* / golden currant**

Deciduous shrub 4-8 ft high and wide found statewide in chaparral and woodland communities in canyons and foothills below 2500'. 🌿💧🌿

***Ribes cereum*/wax currant**

Hardy deciduous shrub 3-6 ft. high, rounded, compact. Small, round, lobed leaves turn yellow-orange in fall. Hanging, tubular pale-pink flowers followed by bright red translucent berries. Full sun or part shade, tolerates drought, wind, heat, cold. Blooms June-July in dry rocky places 5000-12,600 ft. mostly on the east slope of the Sierra Nevada, southern mountains and northeastern California. 🌿💧🌿

***Ribes malvaceum* / chaparral flowering currant**

Deciduous shrub 3-6 ft. high, many erect stems from base. Pale pink, small tubular flowers in drooping clusters 2-4 in. long, blooms winter to early spring. Rounded, lobed leaves 1-3 in. wide have a crinkled, dark green surface. Clusters of small blue berries attract birds. Pretty winter-flowering shrub for dry soils. Full sun to part shade, tolerates drought, heat. Blooms Dec-Mar in dry, wooded or open hills below 2500 ft. in Chaparral, Foothill Woodland and Closed-cone Pine forests of the Coast Ranges, Eldorado County. 🌿💧🌿

***Ribes nevadense* / Sierra currant**

Hardy deciduous shrub 3-6 ft. high, open branching. Showy, pendulous, 1-3 in. clusters of pink to reddish tubular flowers followed by blue berries. Roundish, lobed leaves turn yellow in fall. Part shade or full sun with some water. Blooms May-July in moist places and along streams 3000-10,000 ft. in the Sierra Nevada and N. Coast Ranges. 🌿💧🌿

***Ribes roezlii* / Sierra gooseberry**

Deciduous shrub growing 1-4 ft. high found in canyons and on mountain slopes from 3500-8500' elevation in the Sierra Nevada and mountains of southern California. 🌿💧🌿

***Ribes sanguineum* var. *glutinosum*  
pink flowering currant**

Erect spreading deciduous shrub from 4-6 ft. tall with lobed/toothed foliage, pink flowers, and black berries Jan.-Mar. Found on moist canyon slopes from San Luis Obispo County northward to Del Norte County. 🌿💧🌿

***Ribes speciosum* / fuchsia-flowered gooseberry**

Evergreen shrub 3-10 ft. high found along the coast on moist slopes. 🌿💧🌿

***Rosa californica* / California wild rose**

Riparian and woodland shrub to 6 ft. found statewide along stream banks and moist places from sea level to 4000' elevation. Tolerates sun or shade and is hardy to 15°F. 🌿💧🌿🦋

***Rosa gymnocarpa* / wood rose, baldhip rose**

Small deciduous shrub to 3 ft. high, reddish-pink single roses followed by showy red rosehips. Soft blue-green leaves turn clear yellow in fall. Full sun or part shade, tolerant of cold and dry shade. Blooms May-July in shaded woods below 6000 ft. in many plant communities of the Coast Ranges and Sierra Nevada. 🌿

***Rosa woodsii* var. *ultramontana* / interior wild rose**

Straight, tall, prickly rose from 3-6 ft. high found in moist places from 3500-11000' elevation in forest communities. 🌿

***Rubus parviflorus* / thimbleberry**

Hardy deciduous shrub, mostly under 3 ft. high, spreading. Showy, single white roses 1-1/2 in. wide followed by small, edible raspberries. Attractive, palmately-lobed leaves 3-12 in. wide turn yellow in fall. Beautiful bold-textured groundcover for dry or moist shade. Part or full shade, tolerates drought. Blooms May-July in open woods below 8000 ft. in conifer forests of the Sierra Nevada and N. Coast Ranges. 🌿🦋

***Rubus vitifolius* (*R. ursinus*) / California blackberry**

Deciduous, riparian mounding vine or shrub to 20 ft. long found statewide in moist valley and foothill places or along streams. 🌿🦋

***Salix gooddingii* / Gooding's black willow**

Deciduous riparian tree from 20-30 ft. high found statewide in many locations below 2000' elevation. 🌿🦋

***Salix exigua* (*S. hindsiana*) / sandbar willow**

Deciduous riparian shrub or tree 6-15 ft. high found statewide along stream banks below 3000' elevation. Spreads by underground stems. 🌿🦋

***Salix laevigata* / red willow**

Large deciduous riparian tree 20-40 ft. tall found along streambanks below 5000' elevation statewide. 🌿🦋

***Salix lasiandra* (*S. lucida* ssp. *lasiandra*)  
western black willow**

Deciduous riparian tree growing 20-30 ft. high, found statewide below 8000' elevation. 🌿🦋

***Salix lasiolepis* / arroyo willow**

Deciduous riparian shrub or tree 6-20 ft. high occurring along dry or living streambanks or in moist areas. Found statewide below 5000' elevation. 🌿🦋

***Salvia mellifera* / black sage**

Native evergreen woody aromatic shrub growing 4-5 ft. Leaves are dark green thick and wrinkled. White to pale blue flowers occur in late spring. Native to the coastal sage plant community. Tolerant of heat and drought. ☿ ♀

***Sambucus caerulea* (*S. mexicana*) / blue elderberry**

Deciduous shrub from 4-10 ft. tall or a tree to 40 ft. high found along moist places in open woods or canyons and stream banks to 10000' elevation in the Sierra Nevada and north Coast Ranges and mountains of southern California. ☿ ♀

***Sambucus mexicana* / Mexican elderberry**

Deciduous shrub or tree similar to *S. caerulea* but with fewer leaflets. Found statewide below 4500' in many plant communities. ☿ ♀

***Sedum obtusatum* / Sierra sedum**

Hardy perennial, mat-forming 2-6 in. high. Colorful blue to reddish succulent rounded leaves in thick clustered basal rosettes. Star-shaped, small yellow flowers fade to pale pink on red-tinged stems. Full sun or part shade, tolerates drought, cold, wind, blooms June-July. ☿ ♀

***Sequoia sempervirens* / coast redwood**

Evergreen tree growing 3-5 ft. a year and able to reach 100-300 ft. high and 15-30 ft. wide. Good landscape tree. Seedlings vary greatly. ☿

***Sequoia giganteum* / giant sequoia**

Huge evergreen trees reaching 80-300 ft. tall with dense gray-green foliage. Does best in deep soil with deep, infrequent waterings. ☿

***Sisyrinchium californica* / yellow-eyed grass**

Grass-like perennial to 16 in. tall. Yellow spring flowers. tolerates wet soils. Likes shade. ☿ ♀

***Sorbus californica* / California mountain ash**

Hardy deciduous shrub 3-6 ft. high, multi-stemmed, erect, open branching. Attractive all season. Large flat-topped clusters of white flowers followed by showy display of large clusters of bright scarlet fruit. Large dark-green compound leaves turn yellow-orange in fall. Part shade or full sun with some water. Blooms May-June in moist places 4500-11,000 ft. in Montane Coniferous forests of the Sierra Nevada and N. Coast Ranges. ☿ ♀

***Spiraea densiflora* / mountain spiraea**

Hardy deciduous shrub to 3 ft. high, compact, twiggy. Attractive all season. Many showy, round-topped, dense clusters of tiny pink flowers, fragrant. Small, soft, oval leaves are blue-green turning yellow orange in fall. Full sun or light shade with water. Blooms July-Aug. in moist, rocky places 5000-11,000 ft. in Montane Coniferous forests of the Sierra Nevada and N. Coast Ranges. ☿ ♀

***Spiraea douglasii* / western spiraea**

Hardy deciduous shrub 3-6 ft. high, erect, clump-forming. Dense, elongated 4-6 in. long clusters of fragrant, tiny rose-pink flowers. Long stamens give a fuzzy effect to clusters. 1-3 in. long leaves are felty-white beneath and turn yellow to orange in fall. Full sun or light shade with moisture. Blooms June-Sept in damp places below 6000 ft. in conifer forests of the Sierra Nevada and north western California. ☿ ♀

***Styrax officinalis* var. *californicus* / snowdrop bush (*S. officinalis* var. *redivivus*)**

Deciduous shrub 4-12 ft. tall found in the inner North Coast Range and in the dry Sierra Nevada foothills. Best in part shade inland and tolerates drought, heat, and rocky soils. ☿

***Symphoricarpos albus* var. *laevigatus* / creeping snowberry (*S. rivularis*)**

Low creeper to 18 in. tall with stems rooting as they go. Grows in wooded hills and mountain slopes of the Coast Ranges, Sierra Nevada, and southern California mountains. ☿ ♀

***Symphoricarpos mollis* (syn. *S. acutus*) / creeping snowberry**

Hardy deciduous shrub to 1 ft. high, trailing, rooting branches to 3 ft. long. Dainty, bright pink bell-shaped flowers in small clusters followed by clusters of pure white berries that persist through fall. Soft, small, rounded gray-green leaves turn golden in fall. Excellent large-scale ground cover or erosion control for shaded or damp places. Blooms June-Aug in damp places 3500-8000 ft., Yellow Pine to Lodgepole forests of the Sierra Nevada and Coast Ranges. ☿ ♀

***Symphoricarpos vaccinioides* (syn. *S. rotundifolius*) / mountain snowberry**

Hardy deciduous shrub 3-4 1/2 ft. high, erect, branched, clump-forming. Pale pink 1/2 in. bell-shaped flowers in small clusters hang daintily from the ends of branches. Clusters of egg-shaped, white berries are tinged pink. Small oval, soft leaves are apple-green when they emerge, golden yellow in fall. Full sun to part shade, tolerates drought, cold, wind. Blooms June-Aug in dry stony slopes 5000-10,500 ft. in Lodgepole to Subalpine forests of the Sierra Nevada. ☿ ♀

***Umbellularia californica* / California bay**

Aromatic evergreen tree or large shrub slowly growing 30-60 ft high in woodland or forest communities below 5000'. ☿ ♀

***Vitis californica* / California wild grape**

Woody deciduous vine with sprawling, climbing growth habit. Grows in central and northern state along streams and canyons in Coast Ranges, Central Valley, and foothills of Sierra Nevada below 4000' elevation. ☿ ♀

***Zauschneria californica* / California fuchsia (*Epilobium canum*)**

Showy perennial shrub growing 1-2 ft. high. Pubescent grey-green foliage topped by bright orange to red flowers in the spring. Found on dry slopes, rocky hillsides, below 3500' elevation. ☿ ♀

## WETLAND PLANTS

### *Carex barbarae* / Santa Barbara sedge

Perennial clumping sedge growing 10-40 in. tall. Commonly found from sea level to 3000' elevation in open or brushy slopes of valley flats that are typically wet in spring. Found in many plant communities including Valley Grassland, Foothill Woodland and Coastal Prairie as well as Mixed Evergreen and Yellow Pine forests. 🌿

### *Carex nudata* / torrent sedge

Clumping deciduous sedge growing 18-24 in. tall forming mounds. Showy black flowers arch the ends of the spikes setting above the foliage. Foliage turns tan in the winter. 🌿

### *Carex tumulicola* / Berkeley sedge

Hardy evergreen perennial sedge 8-12 in. high to 30 in. in wetter soil, loosely tufted. Handsome evergreen sedge for meadow plantings, lustrous dark green, fine-textured, mounding foliage. Good for 'moist' lands restoration. Occurs in meadow and grassy slopes 100-4000 ft. from the Coastal Prairie to the Sierra Nevada. 🌿

### *Carex praegracilis* / slender sedge

Perennial clumping sedge found statewide from sea level to 9000' elevation in moist places in valleys, foothills, and mountains. Among other communities, it grows in the Coastal Strand and Scrub, Valley Grasslands, and Red Fir forest communities. 🌿

### *Eleocharis macrostachya* / common spikerush

Perennial sedge growing singly or in clumps with creeping rhizomes and round stems growing from 1-3 ft. tall. Spikerush is found in marshes and vernal pools, along levees and in ditches throughout California. 🌿

### *Juncus balticus* / rush

Erect, round, wiry-stemmed perennial from rhizomes singly or in clumps from 8-30 in. tall. Tiny purplish flowers with green centers blooms May- August. Commonly grows in marshes and boggy soils throughout coastal California. 🌿

### *Juncus effusus* var. *brunneus* / common rush

Stiff, erect perennial with round, bright green stems growing 1.5-4 ft. tall in tufts. Commonly grows in marshes and boggy moist spots near the coast from central California north to Oregon. 🌿

### *Juncus patens* / gray rush

Evergreen perennial 1 1/2-2 1/2 ft. high, erect, clumping. Stiff, slender cylindrical leaf-less stems are a handsome steel blue-green. Interesting brown flowers in small clusters amongst the foliage. This ornamental native rush is an interesting container subject, textured accent or massed for deep blue-green color contrast. Full sun or light shade, requires moist soil. 🌿

### *Juncus xiphioides* / flat-bladed rush

Well distributed rush growing in wet places from sea level to 7000' elevation in all plant communities from the coast to the desert. Stems are flat and grow 1-2 ft. tall. 🌿

### *Lemna minor* / duckweed

Very small, glossy green floating aquatic plant growing in dense populations in stagnant freshwater pools below 3500' elevation statewide. 🌿

### *Polygonum* sp. / knotweed

Common in marshes, pond, and ditches throughout California. Leaves tapered, longer than broad, and dotted. Flowers born on a narrow spike, blooms July-October. Waterfowl feed on seeds. 🌿

### *Sagittaria latifolia* / arrowhead, duck potato

Hardy perennial aquatic plant 1-4 ft. high, floating leaves. Potato-like tubers rooted in saturated soil, relished by ducks. Attractive arrowhead-shaped leaves with parallel veins vary from 6-24 in long. Pretty, tri-petaled, pure-white flowers in whorls of three on stems that stand above the leaves. Blooms July-Aug at edge of ponds and slow streams, meadows, below 7000 ft. in largely fresh water marshes throughout North America. Important waterfowl food source. 🌿

### *Salicornia virginica* / pickleweed

Erect, spreading, fleshy jointed herb found in salt marshes and alkaline flats. Leaves are reduced cusps. 🌿

### *Scirpus acutus* var. *occidentale* / common tule

Perennial sedge with round, stout stems to 15 ft., thick brown rhizomes, and a dense, reddish-brown spikelet inflorescence from spring-summer. Common in brackish and freshwater marshes throughout the coast and below 5000' elevation. 🌿

### *Scirpus robustus* / alkali bull rush

Hardy perennial sedge 1 1/2-4 1/2 ft. high, erect, spreading by rhizomes. Important component of marshes throughout the west. Sharply triangular stems, with terminal clusters of reddish-brown spikelets. Blooms Apr-Aug in Freshwater Marsh, Coastal Salt Marsh, Alkali Sink below 2000 ft., up to 5000 ft. in the Great Basin. Good nesting and cover, large seeds are an important waterfowl food source. 🌿

### *Typha angustifolia* / narrow-leaved cat-tail

Common in fresh water marshes below 2,000'. Erect stout perennial with long, flat, light green leaves 1/8"-5/16" wide when fresh. Flower in tall spikes. Female flowers are a cluster of cigar shaped flowers, blooming June-July. 🌿

### *Typha latifolia* / broad-leaved cat-tail

Common in freshwater marshes below 2,000'. Erect stout perennial with long, flat, light green leaves 3/8"-1 1/8" wide when fresh. Flower in tall spikes. Female flowers are a cluster of cigar shaped flowers, blooming June-July. 🌿

# CALIFORNIA NATIVE GRASSES

Reestablishing California native grasses can provide numerous benefits including: erosion, weed and fire control; biodiversity improvements; enhanced wildlife and beneficial insect habitats. In many situations, establishing native perennial grasses by direct seeding can be difficult, especially when competition from non-native annual species is intense. Out-planting with container stock can make establishment easier and faster. The use of container stock can also be superior in landscape applications and when soil and terrain conditions are difficult.

Cornflower Farms offers native grasses in a variety of container designs and sizes including plugs-PL, super stubbys-L6, treebands-TB, and one gallons. We welcome your questions about the advantages of each size to help you select the best container for your application. *Muhlenbergia rigens* is not available in plugs, only in larger sizes.

## *Aristida ternipes* var. *hamulosa* three-awn

Warm season clumping grass to 10 in. tall with airy but compact inflorescence and three-part awn. This striking grass is very drought tolerant. 🌿 💧 🌱

## *Calamagrostis foliosa* reedgrass

Coastal native clumping perennial grass, mounding to 18-24 in. tall and as wide. Forms tidy green mounds. Leaves blue green, feathery flower panicles 3-6 in. long. Moderate to occasional watering. Hardy to 10F. 🌿 🌱

## *Deschampsia cespitosa* tufted hairgrass

Warm season clumping grass to 10 in. tall with summer flowers to 2 ft. Tolerates partial shade and heavy clay soils. Good in waterside plantings and meadows. 🌿 🌱

## *Leymus glaucus* (*Elymus glaucus*) blue wild rye

Cool season upright perennial bunchgrass, 2-3 ft. tall with bluish blades and summer flowers. Tolerates drought, clay soils, and establishes rapidly. 🌿 💧 🌱

## *Festuca californica* California fescue

Cool season bunchgrass with blue-green blades to 2 ft. and flower stalks to 5 ft. high, creating fountain-like clumps. Drought tolerant for sun or shade. 🌿 💧 🌱

## *Festuca idahoensis* Idaho fescue

Cool season densely tufted perennial grass usually blue in color but can be green. Flowering stalks to 1-2 ft. tall. 🌿 💧 🌱

## *Festuca rubra* 'Molate' Pt. Molate fescue

Cool season perennial growing 8-10 in. tall. Form ranges from clumping to spreading from rhizomes. Has fine texture and reddish color at the base of the leaves. 🌿 💧 🌱

## Native Grass Plug Prices

Plug prices for all species vary by quantity ordered as shown below. Prices include seed from our sources. Ask for a quote if you wish to supply your own seed.

## Deadlines for Ordering:

Cool Season Grasses.....January 15th

Warm Season Grasses.....April 1st



## *Leymus triticoides* creeping wild rye

Cool season grass with upright green blades reaching 2 ft. high with summer and fall inflorescences reaching 3 ft. Spreads by rhizomes. 🌿 💧 🌱

## *Melica californica* California melic

Cool season grass growing 1-2 ft. with flower spikes tinged purple. Tolerates full sun or partial shade, and is summer dormant. 🌿 💧 🌱

## *Muhlenbergia rigens* deer grass

Warm season perennial forming dense clumps from the base. Spikelike flower stalks 2-3 ft. tall. Striking fountain form. 🌿 💧 🌱

## *Poa scabrella* (*P. secunda*) pine bluegrass

Cool season tufted perennial bunchgrass with soft green foliage. Dispersed throughout California, and size dependent on area it's grown in. Summer dormant. 🌿 💧 🌱

## *Sitanion jubatum* (*Elymus multisetus*) big squirrel-tail

Cool season clumping grass with gray-green leaf blades and red-purple inflorescence in summer and fall. Tolerant of full sun and dry soils. 🌿 💧 🌱

## *Nassella cernua* (*Stipa cernua*) nodding stipa

Cool season spreading bunchgrass with thin, fine, leaf blades and graceful flower inflorescence in spring through summer. 🌿 💧 🌱

## *Nassella lepida* (*Stipa lepida*) foothill stipa

Cool season bunchgrass growing 1-2 ft. with graceful shiny flowers to 30 in. and blades that turn reddish gold through fall and winter. 🌿 💧 🌱

## *Nassella pulchra* (*Stipa pulchra*) purple needlegrass

Cool season bunch grass growing 1-2 ft. high with graceful, shiny flower stalks to 30" in spring. Fire retardant, tolerates drought, is good in mass plantings and restoration uses. California's State Grass. 🌿 💧 🌱

Please inquire about other Native Grasses we can grow.

## WILDLIFE USES OF SELECTED NATIVE PLANTS

Botanical Name	Common Name	Wildlife Use		
		Food	Cover	Roost Nest
<i>Acer macrophylla</i>	big-leaf maple			
<i>Acer negundo</i> var. <i>calif.</i>	Calif. box elder			
<i>Aesculus californica</i>	Calif. buckeye			
<i>Alnus</i> sp.	alder			
<i>Arctostaphylos</i> sp.	manzanita			
<i>Artemisia</i> sp.	sagebrush			
<i>Aristolochia californica</i>	Dutchman's pipe			
<i>Atriplex lentiformis</i>	quail bush			
<i>Baccharis</i> sp.	coyote brush			
<i>Calocedrus decurrens</i>	incense cedar			
<i>Ceanothus</i> sp.	Calif. wild lilac			
<i>Cephalanthus</i> sp.	buttonbush			
<i>Cercis occidentalis</i>	western redbud			
<i>Cercocarpus betulids.</i>	mt. mahogany			
<i>Clematis</i> sp.	clematis			
<i>Cornus nuttallii</i>	western dogwood			
<i>Cornus stolonifera</i>	red twig dogwood			
<i>Diplacus aurantiacus</i>	sticky monkey flwr			
<i>Eriodictyon calif.</i>	yerba santa			
<i>Eriogonum</i> sp.	buckwheat			
<i>Fraxinus latifolia</i>	Oregon ash			
<i>Fremontodendron</i> sp.	flannel bush			

Botanical Name	Common Name	Wildlife Use		
		Food	Cover	Roost Nest
<i>Heteromeles arbutifolia</i>	toyon			
<i>Hibiscus californica</i>	Calif. hibiscus			
<i>Juglans c.</i> var. <i>hindsii</i>	Calif. black walnut			
<i>Lithocarpus densiflorus</i>	tan oak			
<i>Lonicera</i> sp.	honeysuckle			
<i>Lupinus</i> sp.	lupine			
<i>Pinus</i> sp.	pine			
<i>Platanus racemosa</i>	sycamore			
<i>Populus</i> sp.	cottonwood			
<i>Prunus</i> sp.	cherry			
<i>Quercus</i> sp.	oak			
<i>Rhamnus</i> sp.	coffeeberry			
<i>Rhus diversiloba</i>	poison oak			
<i>Ribes</i> sp.	currant			
<i>Rosa</i> sp.	wild rose			
<i>Rubus</i>	Calif. blackberry			
<i>Salix</i> sp.	willow			
<i>Sambucus</i> sp.	elderberry			
<i>Styrax officinalis</i> var. <i>calif.</i>	snowdrop bush			
<i>Symphocarpus</i> sp.	snowberry			
<i>Umbellularia californica</i>	California bay			
<i>Vitis californica</i>	Calif. wild grape			

## TREESSENTIALS® TUBEX®

To better serve the needs of our customers, Cornflower Farms is a distributor of Treessentials® Tubex® tree shelters. Treessentials® Tubex®, now an American made product, offers an improved seamless twin-wall design at a new low price.

The Tubex® provides excellent protection from damage by rodents, rabbits, deer, mowers, weed eaters, and herbicides. They also provide protection from drought by creating a greenhouse environment. As the plant matures, the shelter provides support and protects the bark.

Here are the design features of Treessentials® Tubex®:

- Stands up to the rigors of 5-7 years in the field
- No seams or folds to split
- Mesh guard is included
- Bell-flared rim prevents bark abrasions
- Stake recess holds Tubex® tight against the stake to prevent spinning by wind and animals
- Stake ties are ratchet-locking
- Rigid construction allows it to be driven one inch into the ground for proper installation and protection
- Ships as a tube—not flat

Extreme Deer Browse	Each size protects trees from all the dangers shorter sizes do			
Heavy Deer Browse				
Moderate Deer Browse				
Rabbits, Light Deer Browse				
Rabbits, Sprayers, Mowers				
Rodents, Wind and Drought				
PROTECTS AGAINST	2ft	3ft	4ft	5ft

### Treessentials® Tubex® Prices

Please call us for a price quotation

- All prices are FOB St. Paul
- Please call for specific delivery charges
- There is no extra charge for drop shipments
- High volume truckload prices are available

# HUMMINGBIRD AND BUTTERFLY PLANTS

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Landscapes which attract hummingbirds and butterflies give us a rare opportunity to watch some of the most beautiful and exciting animals on earth in our own backyards. Hummingbirds, which are unique to the Americas, are generally attracted to red tubular flowers in their search for nectar. They can also be attracted to other plants to feed on insects to satisfy their fat and protein dietary needs. Hummingbirds are territorial and often inhabit the same garden year after year.

Butterfly plants will attract beautiful adults, and provide the setting for you to witness the life-cycle stages of these amazing creatures. Though eggs are sometimes hard to spot, the caterpillars which emerge can be exotic and almost science-fictional. A butterfly chrysalis can rival the best jewelry made, while the emergence of the adult is nothing short of breathtaking.

In the *Liner and Container Stock* section of our catalog, a number of plants are designated as being attractive to hummingbirds and butterflies. Plants so designated include those cited in books and other literature.



*'Tis an exceeding  
little Bird, and only  
seen in Summer, and  
mostly in Gardens  
flying from flower to  
flower, sucking Hony  
out of the flowers as a  
Bee doth; as it flieth  
not lighting on the  
flower, but hovering  
over it, sucking with  
its long Bill a sweet  
substance'*

—Governor John  
Winthrop of Connecti-  
cut 1670 from "The  
Hummingbird Garden"  
by Mathew Tekulsky)

# BENEFICIAL INSECT PLANTS

The beneficial insect plants we offer are long-lasting and provide food, enhanced habitat, and over-wintering sites for natural enemies of many agricultural pests. Once established, these plants demand minimal, if any, care and can deliver years of benefit.



## SOME PEST AND BENEFICIAL INSECT ASSOCIATIONS

Beneficial Insect	Major Pests	Beneficial Insect Plants
Hoverflies	Aphids Mealybugs	<i>Achillea</i> sp. <i>Ceanothus</i> sp. <i>Asclepias fascicularis</i> <i>Eriogonum</i> sp. <i>Baccharis</i> sp. <i>Prunus ilicifolia</i>
Lady Beetles	Aphids Leafhoppers Scales Mites Mealybugs	<i>Achillea</i> sp. <i>Ceanothus</i> sp. <i>Asclepias fascicularis</i> <i>Atriplex</i> sp. <i>Rhamnus californica</i> native grasses <i>Salix</i> sp.
Minute Pirate Bug	Corn Earworm Whitefly Leafhoppers Mites	<i>Achillea</i> sp. <i>Baccharis</i> sp. <i>Eriogonum</i> sp.
Lacewings	Leafhoppers Mites Aphids Thrips Mealybugs Whitefly	<i>Prunus ilicifolia</i> <i>Quillaja saponaria</i> <i>Ceanothus</i> sp.
Parasitic & Predatory Wasps	Caterpillars Aphids Mealybugs Leafhoppers	<i>Asclepias fascicularis</i> <i>Eriogonum</i> sp. <i>Achillea</i> sp. <i>Myoporum</i> sp. <i>Foeniculum vulgare</i>
Tachinid Flies	Caterpillars Squash Bugs Stink Bugs	<i>Achillea</i> sp. <i>Eriogonum</i> sp. <i>Heteromeles arbutifolia</i> <i>Myoporum</i> sp. <i>Rhamnus californica</i>
Bigeyed Bug	Mites Lygus Whitefly Caterpillars	<i>Polygonum</i> sp. native grasses

Beneficial insect plants can thrive in noncrop areas such as field margins, hedgerows, easements, roadsides, and wildlands near cropland and refuges within cropland. Beneficial insect plants include trees, shrubs, groundcovers and grasses. Insectary plantings can also be designed to attract other desirable wildlife, help suppress weeds, increase biodiversity, improve esthetics while enhancing biological control of insects and other pests.

Designing a beneficial insect planting entails providing beneficial insects with a year-round habitat including food (pollen, nectar, and sometimes prey) and overwintering sites, even when pest populations are low. Various combinations of plants attract beneficials by providing

flowers throughout the year (see the accompanying chart). The best mix of insectary plants for enhancing control of specific pests depends on the crops grown and times of greatest susceptibility. The plants we've listed include both California natives and non-natives. While many species are drought tolerant, supplemental watering can greatly enhance and extend flowering periods.

We'll be happy to answer your questions about using our plant materials to attract beneficial insects in your application. Supplemental literature is available and we can help you assess your site in terms of soil, exposure, water tolerance, etc.. New beneficial insect plant materials are being added regularly - ask us for an update.

FLOWERING PERIODS OF SELECTED BENEFICIAL INSECT PLANTS

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
willow sp.												
ceanothus sp.												
mule fat												
yarrow sp.												
coffeeberry												
holly-leaf cherry												
soapbark tree												
buckwheat sp.												
elderberry sp.												
toyon												
creeping boobiolla												
fennel												
narrowleaf milkweed												
coyote brush												

BENEFICIAL INSECT PLANTS

***Achillea millefolium* / common yarrow**

Spreading perennial with green fernlike foliage and white flower clusters whose stems can reach 2-3 ft. Flowers April-July and attracts hoverflies, wasps, lady beetles and butterflies. 🌿 💧 🦋

***Achillea millefolium* f. *rosea* / rosy yarrow**

Spreading perennial to 8-12 in. high with green fernlike leaves and long stemmed rosy flower clusters. Flowers April-July and attracts hoverflies, wasps, lady beetles and butterflies. 💧 🦋

***Achillea millefolium* 'Paprika' / red yarrow**

Spreading perennial to 8-12 in. high with green fernlike leaves and long stemmed red flower clusters. Flowers April-July and attracts hoverflies, wasps, lady beetles and butterflies. 💧 🦋

***Achillea* 'Salmon Beauty' / salmon yarrow**

Spreading perennial to 8 in. high with green fernlike leaves and long stemmed, showy salmon/peach flower clusters. Flowers April-July and attracts hoverflies, wasps, lady beetles and butterflies. 💧 🦋

***Asclepias fascicularis* / narrowleaf milkweed**

Upright perennial 2-3 ft tall with long narrow leaves and greenish white flowers. Flowers July-October attracts wasps, hoverflies and lady beetles. Host specific aphid also attracts beneficials especially lady beetles. Host plant to monarch butterfly. 🌿 💧 🦋

***Atriplex lentiformis*, big leaf form / Brewer saltbush**

Semi-deciduous shrub 5-10 ft. tall and widely spreading. Adaptable and tolerant to many areas and conditions. Flowers July-October and attracts lady beetles and is excellent cover for quail. 🌿 💧

***Baccharis pilularis* / coyote brush**

Tough woody perennial with small light green foliage and profuse white flowers, females reseed readily. Grows 4-8 ft. high and wide. Female plant flowers October-January, male plants October-November. Attracts wasps, hoverflies, and tachinid flies. 🌿 💧 🦋

***Baccharis viminea (B. salicifolia)* / mule fat**

Erect shrub growing 6-10 ft. tall with long, dark green foliage. Flowers March-May. Attracts hoverflies and lady beetles. 🌿 💧

***Ceanothus 'Concha'* / wild lilac**

Evergreen shrub that grows 6-8 ft. tall and wide. Has small narrow leaves with intense dark blue flower clusters. Tolerant of coastal and inland conditions and summer watering. Flowers March-April. Attracts hoverflies, wasps and lady beetles 🌿 💧 🦋 🦋

***Ceanothus cuneatus* / buckbrush**

Evergreen shrub to 8 ft. with gray-green foliage, white flower cluster. Flowers February-April and attracts hoverflies, wasps, and lady beetles 🌿 💧 🦋 🦋

***Ceanothus g. var. h. 'Yankee Point'* / Yankee Point Carmel creeper**

Fast growing evergreen shrub staying 3-5 ft. tall and 6-8 ft. wide with large bright green leaves and blue flowers. Does well in both coastal and hot inland areas. Flowers March-May. Attracts hoverflies, wasps, and lady beetles. 🌿 💧 🦋 🦋

***Ceanothus 'Ray Hartman'* / Treasure Island blueblossom**

Large evergreen shrub to small tree 8-15 ft. tall and 10-15 ft. wide with 2-3 in. dark green leaves and medium blue flower clusters. Flowers February-April and attracts hoverflies, wasps, and lady beetles. Can provide year round roosting for quail. 🌿 💧 🦋 🦋

***Ceanothus thrysiflorus* / blue blossom**

Hardy evergreen shrub that ranges from 6-20 ft. high to 8-30 ft. wide. Flowers are light to dark blue in spikelike clusters. Flowers March-May. Attracts hoverflies, wasps, and lady beetles. 🌿 💧 🦋 🦋

***Eriogonum fasciculatum var. foliolosum* / California buckwheat**

Evergreen shrub 2-5 ft. high with narrow woolly leaves and pinkish white flowers. Tolerates little to no water. Flowers May-December. Attracts hoverflies, wasps, minute pirate bug, tachinid flies, and butterflies. 🌿 💧 🦋 🦋

***Eriogonum giganteum* / St. Catherine's lace**

Large open shrub growing 4-5 ft. high and 3-4 ft. wide with woolly, gray leaves and flat clusters of cream flowers that turn rust with age. Flowers June-November. Attracts hoverflies, wasps, minute pirate bugs, tachinid flies, and butterflies. 🌿 💧 🦋

***Heteromeles arbutifolia* / toyon**

Evergreen shrub 8-15 ft. high or small tree to 25 ft. Has leathery toothed leaves, white flowers, and clusters of red winter berries. Tolerates sun or partial shade, heat, smog, wind, and heavy or light soils. Flowers May-June. Attracts hoverflies, wasps, and tachinid flies 🌿 💧

***Isomeris arborea* / bladder pod**

Dense evergreen mounding shrub 3-6 ft. high and as wide. Flowers February-May. Attracts Harlequin bug throughout summer which may be used as alternate prey for stink bug predators. 🌿 💧

***Myoporum parvifolium* / creeping boobialla**

Fast growing ground cover 3 in. high and to 9 ft. wide with bright green foliage and white flowers. Withstands heat well. Flowers June-October. Attracts wasps, hoverflies, tachinid flies and butterflies.

**Native Grasses**

Most native grasses provide excellent habitat for ladybeetles and can act as a ground cover to help suppress weeds. See the *Native Grass* section. 🌿 💧

***Polygonum aubertii* / silverlace vine**

Hardy fast growing deciduous vine for fences or arbors. Glossy heart shaped leaves with small creamy white flowers. Flowers April-November. Attracts hoverflies, wasps, tachinid flies, and butterflies. 💧 🦋

***Prunus ilicifolia* / hollyleaf cherry**

Evergreen shrub or tree from 20-40 ft. with dark green toothed foliage, white flowers and red fall berries. Flowers April-May. Attracts lacewings, lady beetles, hoverflies, and wasps. 🌿 💧

***Prunus lyonii (P. ilicifolia ssp. lyonii)* / Catalina cherry**

Evergreen shrub or tree from 15-40 ft. high and 20 ft. wide. Showy white flowers in spring and red fruits in fall. Resistant to oak root fungus. 🌿 💧 🦋 🦋

***Rhamnus californica* / coffeeberry**

Evergreen shrub reaching 12-15 ft. high with white flowers developing into large green to black berries. Flowers April-May. Variety *Rhamnus californica* 'Eve Case' is more compact to 3-8 ft. tall and as wide. *Rhamnus californica* ssp. *tomemella* is the grayer foothill form. Attracts lady beetles, hoverflies, and wasps. 🌿 💧

***Rubus vitifolius (R. ursinus)* /**

**California blackberry**

Deciduous, mounding vine with large trifoliate leaves and small white spring flowers. May provide alternate host/overwintering habitat for parasitic wasps. 🌿

***Salix goodingii* / Gooding's black willow**

Deciduous tree from 20-30 ft. with narrow light green leaves. Flowers March-April. Attracts lady beetles, wasps, and hoverflies. 🌿

***Salix laevigata* / red willow**

Large deciduous tree 20-40 ft. tall. Flowers March - May. Attracts lady beetles, hoverflies, and wasps. 🌿

***Salix lasiandra (S. lucida ssp. lasiandra)* / western black willow**

Deciduous tree growing 20-30 ft. high and 20 ft. wide. Large leaves smooth and green above, white and hairy beneath. Flowers March-April. Attracts lady beetles, hoverflies, and wasps. 🌿

***Salix lasiolepis* / arroyo willow**

Deciduous shrub or tree 6-20 ft. high. Leaves smooth and green above and hairy below. Flowers January-February. Attracts lady beetles, hoverflies, and wasps. 🌿

***Sambucus mexicana* / mexican elderberry**

Deciduous shrub from 4-10 ft. tall or a tree to 40 ft. high. Leaves are pale green with 3-5 leaflets with white flower clusters developing into blue berries. Flowers April-November. Attracts hoverflies and wasps. 🌿

# BIOMASS AND WINDBREAK STOCK

Our *Eucalyptus* and *Casuarina* produced from seed originate from superior trees in regions of Australia which have been found to produce excellent trees in California. These sources have been selected for specific beneficial attributes such as biomass value and salt and freeze tolerance. Eucalyptus Improvement Association (EIA) certified clones are now available. These are the

product of many selections and produce a plant which is superior in uniformity and performance.

It is preferable that these materials be contract grown in order to insure that they will not be overgrown, Minimum order of 1000 per species is required. These materials are generally grown in a Super Stubby Leach Tube (1 1/2" dia. x 6" long). Upon request, they can also be grown in rosepots.

## *Acacia melanoxylon* / blackwood acacia

Fast growing evergreen tree reaching 30-50 ft. with a 20-30 ft. spread. Windbreak and biomass value. Hardy to 20° F.

## *Casuarina cunninghamiana* / river she oak

Fine textured evergreen tree reaching up to 70 ft. tall with a 25 ft. spread. Good in hot areas where it survives well with deep and infrequent watering. Hardy to 10° F.

## *Casuarina glauca* / beefwood

Fast growing tree to 50 ft. high and 20 ft. wide. Fine textured pendulous blue-green foliage. Hardy to 10° F.

## *Eucalyptus camaldulensis* / river red gum

Large tree from 60-120 ft. high with drooping branches and mottled peeling bark. Hardy to 12°-15°F and tolerant of heat, drought, and wind. Biomass value.

## *Eucalyptus cinerea* / silver dollar tree

Medium tree 20-40 ft. high with gray-green foliage and irregular branch structure. Hardy to 14°-20°F and tolerates wind, heat and drought. Floral ornamental value.

## *Eucalyptus dalrympleana* / mountain gum

Large tree growing 90-120 ft. high and is hardy to 10°F. Biomass value.

## *Eucalyptus globulus* / southern blue gum

Large tree from 150-200 ft. high and hardy to 20°F. Good windbreak but needs lots of room.

## *Eucalyptus globulus* 'Compacta' / dwarf blue gum

Multibranching shrublike tree reaching 30-50 ft. with blue-gray foliage. Hardy to 20°F.

## *Eucalyptus grandis* / flooded gum

Large tree 140-180 ft. high and hardy to 25°F. Can withstand high moisture areas.

## *Eucalyptus gunnii* / cider gum

Very hardy tree to 5°F reaching a 40-70 ft. vertical height. Good shade, screen, or windbreak tree.

## *Eucalyptus mictotheca* / coolibah

Bushy sometimes multitrunked roundheaded tree to 35-40ft. Hardy to 5-10°F. Ornamental value.

## *Eucalyptus nicholii* / willow-leaved peppermint gum

Graceful fast growing medium tree growing 40 ft. high with light green narrow aromatic foliage. Hardy to 12-15°F. Ornamental value.

## *Eucalyptus nitens* / shining gum

Very large tree growing from 100-150 ft. high. Hardy to 10°F. Biomass value.

## *Eucalyptus pauciflora* / ghost gum

Graceful medium tree 40 ft. high and wide at the crown with a distinctive white trunk and branches. Hardy to 10°-15°F. Floral ornamental value.

## *Eucalyptus perriniana* / round-leaf snow gum

Small scraggly tree 15-30' best sheared as shrub. Hardy to 10-15°F. Juvenile silver foliage good for floral arranging. Floral ornamental value.

## *Eucalyptus polyanthemos* / silver dollar gum

Medium-fast growing tree from 30-60 ft. high and hardy to 20°F. Prefers loose well draining soil. Ornamental value.

## *Eucalyptus pulverulenta* / silver mountain gum

Small, sprawling, irregular tree or shrub form 15-30 ft. Juvenile foliage used for floral arrangements. Hardy to 15-21°F. Prefers loose well draining soil. Ornamental value.

## *Eucalyptus robusta* / swamp mahogany

Grows 80-100 ft. tall and is hardy to 20°F. Grows well in moist soils and is a good windbreak.

## *Eucalyptus rudis* / desert gum

Single or multi-trunked tree 30-50 ft. high with weeping branches. Hardy to 15°F and tolerates wind, heat, and alkaline or saline soils. Windbreak and biomass value.

## *Eucalyptus saligna* / Sydney blue gum

Tall tree to 60-80 ft. with very fast growth. Hardy to 20°F. Windbreak and biomass value.

## *Eucalyptus sideroxylon* / red ironbark

Fast growing tree from 30-50 ft. high with deep red furrowed bark blue-green leaves and showy pink flowers. Hardy to 15°F. Windbreak and ornamental value.

## *Eucalyptus viminalis* / manna gum

Large spreading tree reaching 100-150 ft. high. Hardy to 15°F. Biomass value.

Other species propagated upon request



*Eucalyptus camaldulensis*  
river red gum

# THE BOOKSHELF

The books briefly described below touch upon many of our interests and have been found to be useful here at Cornflower Farms. All should be available through most full-service bookstores. Also, other information such as hand-outs, and article reprints on a variety of subjects are available directly from us so please ask.

## **The Jepson Manual, Higher Plants of California** edited by James C. Hickman

(University of California Press, Berkeley CA; 1996). This is the authoritative identification guide with nearly 8,000 native or naturalized plants that grow wild in California

## **Landscape Plants for Western Regions** by Bob Perry

(Land Design Publishing, Claremont CA; 1992). A beautiful book covering 650 western native and adapted plants with 1,100 color photographs. Has guidelines for water conservation, wildlife benefit, plant groupings, design checklists and western native plants.

## **Oaks of California**

### by Bruce M. Pavlik, Pamela C. Muick, et. al.

(Cachuma Press, Los Olivos CA; 1991). This complete book covers oak species in California, natural history, ecology, wildlife and preservation.

## **Complete Garden Guide to Native Shrubs of California** by Glenn Keator

(Chronicle Books, San Francisco CA; 1993). An authoritative guide to over 500 species of native shrubs. Contains detailed information on watering, pruning and landscaping in a variety of climates.

## **Complete Garden Guide to Native Perennials of California**

### by Glenn Keator

(Chronicle Books, San Francisco CA; 1990). This earlier book by the author covers 500 species of native perennials and covers soils, water and design.

## **A Flora of the Marshes of California** by Herbert L. Mason

(University of California Press, Berkeley CA; 1957). A complete listing of the wetland flora of California. Includes ID keys, descriptions and habitat ranges.

## **The Encyclopedia of Ornamental Grasses** by John Greenlee

(Rodale Press, Emmaus PA; 1992). A comprehensive, fully illustrated reference with descriptions and color photos of over 250 grasses. Design information is nicely presented.

## **The Butterflies of North America** by James A. Scott

(Stanford University Press, Stanford CA; 1986). This is the authoritative and massive (583 pages) reference for those interested in butterflies and creating habitat. Precise butterfly/host plant information.

## **Bulbs of North America** North American Rock Garden Society

(Timber Press, Inc, Portland OR; 2001). A collection of articles on bulbous plants native to North America. Information for the gardener and hiker alike.

## **Common Riparian Plants of California** by Phyllis M. Faber and Robert F. Holland

(Picklewood Press, Mill Valley CA; 1988). An easy to use field guide with photocopies of plants.

## **Common Wetland Plants of Coastal California** by Phyllis M. Faber and Robert F. Holland

(Picklewood Press, Mill Valley CA; 1988). An easy to use field guide with photocopies of plants.

## **Plants Used by the Indians of Mendocino County, California**

### by V. K. Chestnut

(Mendocino County Historical Society, Ukiah CA; 1974). Reprinted as first published in 1902, this book presents information on use of native plants by Native Americans.

## **Grasses of California** by Beecher Crampton

(University of Ca. Press, Berkeley CA; 1974). This pocket guide surveys the ranges and provides identification keys for introduced and native grasses.

## **Sierra Nevada Wildflowers** by Karen Wiese

(Falcon Publishing, Inc, Helena MT; 2000). A field guide to common wildflowers and shrubs of the Sierra Nevada, including Yosemite, Sequoia, and Kings Canyon National Parks.

## **Plants of the Tahoe Basin** by Michael Graf

(California Native Plant Society Press, Sacramento CA; 1999). A comprehensive illustrated guide to the trees, ferns, and flowering plants of the Tahoe Basin.

## **Gardening with a Wild Heart** by Judith Larner Lowry

(University of California Press, Berkeley CA; 1999). A living book on native plant gardening, natural history, ecology and nature writing.

## **The Hummingbird Garden** by Mathew Tekulsky

(Crown Publishers, Inc, New York; 1990). One of the few books on hummingbirds bent toward California. This book has a good plant list, hummingbird identification and landscape design information.

## **The California Landscape Garden: ecology, culture, and design**

### by Mark Francis and Andreas Reimann

(University of California Press, Berkeley CA; 1999). A testament to ecological gardening connecting history, culture, region, and design to understand the evolution and cultivation of California and ways today to make a difference in the states future.



# PLANTING AND IRRIGATION GUIDELINES

## When to contact us

It is best to contact us at the earliest stage of the project planning process as possible. For large projects it is preferable to contact us six months to a year in advance of planting so we can have your order ready and in prime condition. For small projects stock on-hand can usually be obtained on short notice. We will be happy to share our experience if you need assistance in selecting the plant materials for your project. For additional information please refer to instructions in the "How to Order" section of this catalog.

## When to Plant

For the highest survival and establishment rate possible it is generally best to plant the plant materials listed in this guide during the period from late fall to early spring. Planting at other times can be successful but requires closer attention especially to irrigation. At any time of the year it is not good to subject plants to hot, windy and dry soil conditions during or immediately after outplanting.

## How to Pick-up Plant Materials

For large projects please notify us a week in advance of when you want to pick-up materials so we can complete the final grading of your order. For small orders please allow two to three days advance notice. For large orders that we deliver to the project site (one drop point only) please notify us as soon as possible so that your order can be worked into our delivery schedule.

It is very important to pick-up materials in a covered vehicle. Tarpaulins can be used so long as they are taut and sufficient headspace above plant materials is provided so that whipping action from wind will not damage plants.

At the project site, an on-site nursery area (partially shaded is preferred) should be established. Some container stock can be seriously damaged if neglected (for only one day and subjected to heat stress). If an on-site nursery can not be provided pick-up only what you can plant one day in advance.

## How to Plant

The accompanying diagram shows a suggested planting method for most of the plant materials discussed in this catalog. Have the hole ready to plant into. Be sure the bottom backfill material has been settled and that the hole is deep enough so that the bottom of the root ball is not 'J-rooted'.

It is very important to train planters on the

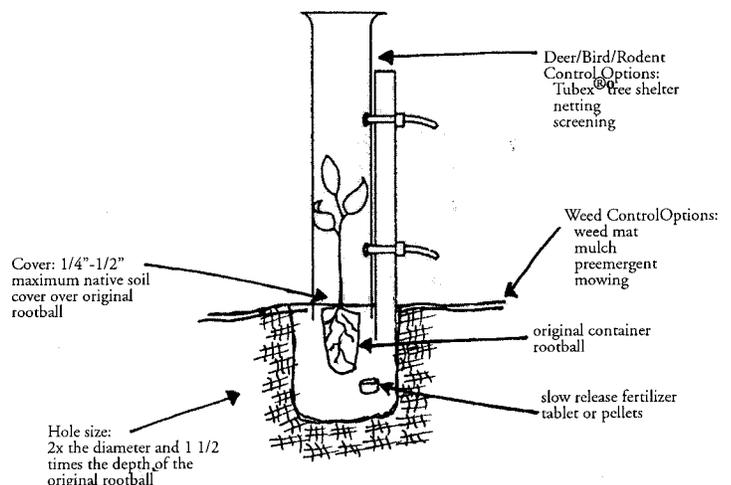
proper method of removing plant material from the container. This can be critical!

- Make sure the container soil is moist to reduce friction.
- Gently squeeze (treebands, deepots, treepots) or roll (supercells) the container in your hands to break the soil/container surface connection. Don't squeeze so hard that you distort the root ball and break root hairs.
- Gently tap the plant out of the container, cradling it as it comes out. **Do not pull out by the plant stem!**

Planting depth is also critical. The top edge of the root ball should not be buried deeper than 1/4" to 1/2" below the original soil line. Plants such as *Cercis*, *Heteromeles*, *Pinus*, and *Rhamnus* are extremely intolerant to deeper planting. Excessive depth will cause immediate death or lack of development and eventual death over time. After backfilling, water plants to eliminate air pockets. If plants settle too low after being watered in, use a shovel or bar to gently lift the plant to the proper level; again, do not pull by the top stem!

For plugs, planting can be easily done by using a dibble stick approximately three feet long with an end point shaped like a plug (pad the opposite end to make work easier on the hands). Grass species can be removed from plug trays by grasping and gently pulling the leaves. Other species should be tapped-out using a small mallet. Press the plug into the dibble hole so that good plug/soil contact is made. One person can plant 2,000 to 3,000 plugs a day using this method.

## Suggested Planting Method



**How and When to Irrigate**

After out planting and during the establishment period supplemental watering will be needed by almost all species. Irrigation is usually best accomplished using either drip or furrow irrigation. In addition to conventional drip emitters, small microsprinklers can encourage some plant materials to spread by self seeding or rhizomes.

The best answer to when to irrigate is dependent on several factors including the plant species (drought and water tolerance, root system/depth, etc.) and planting method (ground cloth or mulch used, shading provided, etc). In general deep infrequent irrigation is preferred to frequent and shallow. The best way to establish irrigation length and frequency is to watch plant material for signs of wilting and to check water depth penetration by digging into the soil profile.



**HOW TO ORDER**

To order plants from Cornflower Farms, use the Order Form insert provided. We are in business to fill wholesale-sized orders. Therefore quantity discounts are given as orders approach wholesale quantities. A minimum order of 5 plants per species is required for treeband and supercells and superstubby containers materials,

The accompanying chart shows a representative irrigation guide for most upland species for two years after planting in loam and clay soils in the Central Valley. Sandy soils will probably require more frequent irrigation. If drought conditions persist occasional watering during the third year may be necessary. In certain applications such as beneficial insect plantings, continued periodic irrigations may be desirable to promote and extend flowering.

**Irrigation Guide for New Revegetation Sites**

MONTHLY WATERING FREQUENCY		
MONTH	FIRST YEAR	SECOND YEAR
January	0	0
February	0	0
March	0	0
April	1	0
May	2	0
June	2-3	1
July	3	1
August	3	1
September	2-3	1
October	1-2	0
November	0	0
December	0	0

200 plants for plugs and 1000 for biomass trees. There is no minimum order for larger container materials which are available upon request.

All Contract grown orders require a 50% growing deposit (less sales tax) at the time the order is placed. The balance is due upon delivery or pickup of the order.

# TERMS AND CONDITIONS

## Terms of Sale:

Cornflower Farms sales are made to the wholesale trade only. All prices are F.O.B. Elk Grove, California. Prices are subject to change without notice. Terms are CASH ON DELIVERY unless buyer has obtained PRIOR CREDIT APPROVAL from Cornflower Farms. Buyer will be invoiced with shipment of stock and payment shall be due on the tenth day of the month following the month of shipment. A service charge of 2% per month (24% per year) shall be paid on all past due accounts. Past due accounts are subject to being placed on a C.O.D. basis. We reserve the right to deny credit to overdue accounts.

## Credit Card Sales:

Cornflower Farms accepts Visa and Mastercard.

## Will Call Policy:

Will call orders must be called in 24 hours in advance of pickup.

## Delivery:

We provide a curbside delivery. The driver is not responsible to "spot" plants in locations or carry plants into the job site. We require assistance when unloading at all job sites and nurseries.

## Freight Charges:

We make regular deliveries to the cities listed below. Delivery schedules vary; please contact us for specific information. The following rates apply to our regular scheduled delivery routes only. Deliveries not within our normal areas or below the minimum order will be subject to additional charges. Outside shipping services available at customers risk. Boxing and shipping charges apply.

Area Served:	% Freight Chg	Min. Order	Under Min. Freight Chg
■ Zone 1: Sacramento, Davis, Woodland, Auburn, Cameron Park, Stockton	3%	\$300	\$60
■ Zone 2: Walnut Creek, Napa, Yuba City, Grass Valley, Placerville, Modesto	4%	\$400	\$80
■ Zone 3: Santa Rosa, S.F., Oakland, San Jose, Carmel, Madera, Reno, RedBluff	5%	\$500	\$100
■ Zone 4: Redding, Fresno, Bakersfield, San Luis Obispo	7%	\$600	\$120
■ Zone 5: Santa Barbara, Los Angeles, Riverside, San Diego	10%	\$700	\$140

## Claims:

All claims must be made immediately upon receipt of goods. We will not honor claims which are filed after goods have been accepted or which are not made within five days after arrival.

## Non-warranty:

We exercise extreme care to have all plants true to name. Nevertheless, Cornflower Farms gives no warranty, expressed or implied, as to variety, description, life, or productivity of any nursery stock we sell. Liability in all instances is limited to the purchase price. If the purchaser does not accept the goods on these terms, they are to be returned at once.

## Contract Growing:

Please inquire on our contract growing of California Natives for use in revegetation projects. We also contract grow natives and general ornamentals for shifting stock for the wholesale nursery trade. A minimum order of \$250.00 is needed for contract grown orders. There is an additional charge of 20% for orders of split flats of 25 per species.

## Refundable Container Deposit:

Refundable container deposits are due and payable at shipping. A container refund is issued if containers are returned in good condition within 60 days of shipping. It is the customers responsibility to return containers to the nursery. If pickup is needed there will be a pickup freight charge as noted above. Containers must be separated and organized for pickup or an additional hourly charge will be applied.

## Restocking Policy:

Customers will be charged a restocking fee of 20% of the value of any approved returned materials.

## Holding Policy:

Due to our perishable product open stock plants which are saleable at time of order cannot be held over 30 days. If held beyond 30 days full payment may be required plus a monthly maintenance fee. These conditions apply unless special arrangements have been made in advance.

GWSS Compliance GWSS #34-003

**California Nursery Stock Certificate No: B5743** - Shipments need not be held for inspection in California. Issued by: Sacramento County Agricultural Commissioner and California Department of Agriculture, Sacramento 95814



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## About Cornflower Farms

Since Cornflower Farms started business in 1981, our philosophy has been "grow what everyone else will not or can not grow". Over the years this philosophy has guided us to develop several plant application markets. Throughout our history we have gained a reputation as being one of the leading growers of quality plant materials and providing the best service possible. Our team approach to production makes this possible. No one is 'beyond' doing any task at Cornflower Farms. Our approach to quality means that the management and production staff work side-by-side. Together we are always striving to improve production efficiency and product quality.

We want you to know that we never take our reputation for granted. When you place an order with us, it will be filled with superior plant materials on time, and at a competitive price.

## About our illustrations

All the illustrations in our catalog are by Daisy Mah, a Sacramento horticulturalist, photographer, and artist. Working for the Sacramento Department of Parks and Recreation, Daisy almost single-handedly restored William Land Park's gardens, unearthing long-hidden flower beds and replanting them to their original colorful glory. Her hand-colored, black-and-white panoramic photographs of gardens have been exhibited at the Crocker Art Museum and Archival Framing. In this catalog she used a scratchboard / woodblock style.

