

Native Plants

Chaparral sand-verbena(Abronia villosa var aurita)- has larger flowers than Abronia villosa var. villosa. It is found on the coastal side of the southern California mountains in chaparral and coastal sage scrub plant communities. Sandverbena likes full sun, and sandy soil. Sand-verbena has gray foliage with pinkish purple flowers, flowers year-round, and the flowers are fragrant.





California Sagebrush (Artemisia californica)- is an evergray shrub, three to four foot high. Artemisia californica likes full sun, near coast, west and even north slope inland and little or no water after established. Although it doesn't seem to care if it has clay or sand, this sagebrush hates being wet in the summer. Seeds germinate after wildfires, and burnt plants crown sprout after fires. Great wildlife plant, Quail love it!







California Croton (Croton californicus) -Native perennial to about 3 feet in height; silver-green in appearance due to stellar, scale-like hairs. The small flowers are unisexual, with female and male flowers on separate plants (dioecious).







Vernal Barley (Hordeum intercedeus)- more commonly known as bobtail barley, is an annual grass, 1.0-3.5 dm tall, with erect, flat blades. Auricles are absent. The inflorescence is erect, 2-7 cm long, breaking apart in fruit, with the central and lateral spikelets often falling together. Spikelets are arranged in 2 opposite rows, 3 per node, with the central one fertile, sessile. The central spikelet has awn-like, subulate glumes that are slightly wider near the base and are 8-15 mm long; lemmas are 5-9 mm long, and awns are 6-12 mm long. The lateral spikelets are short-pedicellate, sterile or staminate, with awn-like glumes 12-18 mm long; lemmas are 2-6 mm long, with acute apices or with awns 0.5-1.5 mm long. Flowering times are March-May (June).



Bladderpod (Isomeris arborea)- is an erect, rounded and profusely-branched, disagreeably-smelling shrub growing from 3' to 6' tall with branches that are minutely downy. The leaves are alternate, entire, petiolate and trifoliate with leaflets that are oblong-

elliptic, to 1-3/4" long, and have smallish, pointed tips. The showy yellow flowers are in dense terminal racemes to 12" long. The calyx is four-cleft, the green sepals fused in the basal half. There are four petals 1/2" long, six yellow stamens that are long exserted, and a pistil with a short style that is sometimes aborted in bud. The fruit is a large, swollen elliptic capsule to 2" long with a pointed tip that contains smooth seeds and hangs down. Bladderpod blooms throughout much of the year.





Coastal Goldenbush (Isocoma menziesii var.venestus)- is an erect shrubby perennial with slender, leafy, branching stems growing to 4' tall. It is quite variable but generally has a resinous exudate especially on the leaves, which are alternate, crowded, linear to linear-spatulate, entire or somewhat spinose-toothed, glabrous or with a glandular pubescence, and with an obtuse to acute tip. Quite often there are also prominent axillary fascicles. The upper leaves are reduced and tend to be more entire-margined. The numerous discoid flower heads are in dense terminal clusters and have phyllaries well-imbricated in 3-6 series, each of which has green mucronate tips. There are 12-22 disk flowers with a pappus of many brownish hair-like bristles, and no ray flowers. Coast goldenbush is common in dry sandy slopes and flats of coastal sage scrub and coastal strand from San Diego Co. to c. California, and blooms from April to December.





Miniature Lupine (Lupinus bicolor)- is a small, blue and white, annual lupine growing to 16 in. in height. A usually small, grayish, hairy, branched plant with palmately compound leaves and blue-violet and white pea flowers arranged in whorls in short, thick, cone-like racemes. The pea-like flowers occur in a short raceme and are subtended by small, palmately compound leaves.







California Box Thorn (Lycium californicum)is a desert-like shrub that has leaves that may conceal many thorns.





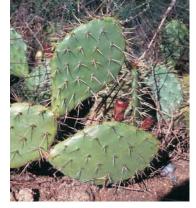


California Evening Primrose (Oenothera Californica ssp. californica) - is a coarse-stemmed perennial 4"-20" high with branches prostrate or rising at an angle, and stems with appressed hairs and exfoliating bark. The leaves are variable, rosetted

when young, later oblanceolate to spatulate toward the base, and oblong to lanceolate above, entire to wavy-margined and toothed. The flowers are large and showy, white aging to pink, and on short petioles in the leaf axils, and typically open in the evening. The flowering buds are nodding. There are four petals to 1-1/4" long, orbicular to obovate, and each flower has eight stamens and a fourlobed stigma. The fruit is a cylindric seed capsule, straight or curved, 3/4" to 2" long with smooth, obovoid brown seeds with dark spots in a single row per chamber. California evening primrose grows in mostly sandy dry places below 6000' in coastal sage scrub, chaparral, southern oak woodland, dunes, and desert scrub to pinyon-juniper or ponderosa pine woodlands, blooming from April to June.



Coastal Prickly Pear (Opuntia littoralis)- is a sprawling prickly-pear up to 2' high and several feet wide, flowers May through June, and often found in huge colonies, its glistening red fruits contrasting with its yellow-green stems. It is most common in southwestern California, where is usually dwells in the California chaparral.





Coastal Cholla (Opuntia prolifera)- is a multibranched shrub that grows up to 8 feet and has purple-red flowers, less than one inch from April to June. The fruit is generally sterile, pear-shaped to nearly round, without spines, fleshy and green, 1 1/2 inch long, often producing flowers the following year which will result in clustered fruits.





Riparian Habitat

Coyote Bush (Baccharis pilularis)- or Chaparral Broom, is an evergreen, fire-retardant shrub growing in coastal shrub and chaparral communities below 2500 feet from San Diego to Oregon. This drought-resistant bush has separate male and female plants, and blooms in late summer. It provides shelter for wildlife, as well as nectar for a great many bees, butterflies and other insects.. They are rather scrubby bushes that are not as full as those found along the local hills. When flowers are present they appear in clusters, each flower being rather small and yellowish white in color. The leaves tend to be sticky and are oblong in shape anywhere from 1/4 to 1 inch long.







Mule Fat (Baccharis salicifolia)- is the most common plant seen near the creek bed. Its common name comes from the prospectors who used to tie their mules to the branches - the mules would eat the plant and become fat from it. With narrow, willow-like leaves, it can grow to 12 feet.







Bush Sunflower (Encelia californica)- is a much-branched perennial shrub to about 4' tall with alternate, entire, 3-veined, lanceolate to ovate leaves on slender glabrous to slightly pubescent stems, and showy floral heads with 15-25 yellow ligules and a red-brown to purplish disk. It blooms from February to June.





California Buckwheat (Eriogonum fasciculatum)- is low-spreading shrub that grows to 3 ft. high and 6 ft. wide. The decumbent stems are branched and leafy; the leaves being small, narrow & leathery. Flat-topped clusters of whitish or pinkish, slightly fragrant flowers occur at the branch tips. This shrub is a favorite of bees and butterflies.







Mexican Elderberry (Sambucus ursinus)- is a small tree or tall shrub growing to 25', but often shorter. It has opposite, pinnately-compound leaves with 3-9 finely-toothed, elliptic to ovate leaflets with acuminate apices. The many small white flowers are in a ± flat-topped inflorescence to 4" wide, and individually have five sepals and five petals that are fused at the base, five stamens with yellowish anthers and a single pistil. The fruit is a nearly black berry, densely white glaucous, thus giving it a bluish cast. This is a very common shrub along streambanks and dry open places, flats, valleys and canyons below 4500' in much of cismontane s. California, blooming from March to September.







California Blackberry (Rubus ursinus) - is native vine that grows best in moist soils near a water source. The vines become a very dense ground cover when allowed to naturalize. The valley oak riparian forests of old had an understory that had a high concentration of these blackberry vines. Birds, rodents, coyotes, bears and many insects competed with the native people for this early bearing fruit. The California Blackberry flowers in March and April, producing small flavorful blackberries by late May and June. Don't eat the red ones - they are tart and sour. The berries turn a deep dark purple, or black, when ripe and ready to eat. The prickles are tiny compared to the non-native Himalayan Blackberry, but you still need to be cautious when picking these tasty delights.







California Blue-Eyed Grass (Sisyrinchium bellum)-is so called because of its long grass-like leaves and its tendency to grow in grassy meadows, is a green to glaucous tufted perennial 12"-16" tall. The stems are flattish or somewhat winged and the flowers appear at the top. What appears to be six petals is actually three petals and three sepals joined at the base, forming a tube with a yellow center. The color of the flower is a deep bluish-purple to blue-violet and rarely white, and the tips of the perianth segments are truncate to notched with a small point. Although most of the leaves are basal, there are alternate cauline leaves as well which are shorter. The fruit is a dry dark or pale-brown capsule with 1-few seeds in a locule.



Common Tidy-tips (Layia platyglossa)-is a very showy yellow-white annual composite that grows to six inches tall and a foot across. Each flowerhead is actually made up of 20-40 individual flowers. The outer ray flowers look like petals while the inner disk flowers are tiny and tubular (tube-shaped). They germinate after the first fall rains. As soon as the weather warms, they grow quickly and can bloom in late March or early April.





California Goldfields (Lasthenia californica)-is a low, slightly pubescent, slender, unbranched annual, 2-6 in. tall, with threadlike leaves and small, yellow, radiate flowers. A small, slender annual with reddish stems, very narrow opposite leaves, and a small golden-yellow flower head at the end of each branch. In better soils, the plant is stouter and reaches 10 in. in height.



California Poppy (Eschscholzia californica)- has feathery, highly-dissected, blue-green leaves clasp the 1-2 ft. stems of this popular, perennial wildflower. Showy, 1-3 in. wide, four-petaled flowers are open only on sunny days. The flowers are solitary and long-stalked and vary in color from orange to yellow. Each of the satiny petals has a deep-orange spot at its base.







California Fuchsia (Epilobium canum)- is a slender-stemmed and muchbranched herbacious perennial with toothed, green, lanceolate to ovate leaves that have a densely spreading-hairy and glandular pubescence. The lower leaves are generally opposite, the upper mostly alternate. The flowers are scarlet on short axillary stems, tubular-funnelform in shape with a basal bulge, with four two-cleft petals. There are eight stamens and one pistil, exserted. The species was formerly named *Zauschneria californica*. The blooming period is from August to September. California fuchsia grows at elevations of up to 10,000' in dry areas, rocky slopes and cliffs, and montane coniferous forest from San Diego Co. to Oregon.





Wishbone Bush (Mirabillis californica var californica)- is a low, much-branched perennial with slender, somewhat weak stems, woody at the base, herbacious above, and ascending to decumbent. The stems repeatedly fork, are glandular-hairy and sometimes are supported by other bushes. The opposite, entire-margined leaves are ovate to ± heart-shaped. The flowers are in green, calyx-like involucres which are campanulate and clustered near the ends of branches. What appears at first to be the five petals are actually petaloid sepals which are cleft and pink to purple-red in color. Wishbone bush has no petals. The five long-exserted stamens are whitish with yellow anthers. This is a fairly common bush on dry slopes and stony washes mostly below 2500' in coastal sage scrub, chaparral and foothill woodlands from cismontane central California to San Diego Co. and extending

to the desert edge and Channel Islands, blooming from December to June. It gets its common name from the many dry forking stems which resemble a chicken "wishbone," and the family name derives from the fact that it is night-pollinated and opens in the mid-afternoon.





Arundo Reed

Giant reed, also known as wild cane, is a tall, perennial grass that can grow to over 20 feet in height. Its fleshy, creeping rootstocks form compact masses from which tough, fibrous roots emerge that penetrate deeply into the soil. Leaves are elongate, 1-2 inches wide and a foot long. The flowers are borne in 2-foot long, dense, plume-like panicles during August and September.





Wild/Hedge Mustard

This adventive annual or winter annual plant is 1-3' tall, branching occasionally. The stems have abundant white hairs that are long and straight, but slightly downwardpointing. There is often a reddish purple ring or patch at the junction of a new stem developing from an older stem. This is a distinctive characteristic for this particular species of mustard. The alternate leaves are up to 6" long and 2" across, becoming smaller and more sessile as they ascend the stem(s). Some of the upper leaves may even clasp the stem, while the lower leaves always have petioles. These leaves are highly variable in shape, but are usually ovate, oblanceolate, or obovate, A typical lower leaf is usually broader toward its tip than at the base and somewhat pinnatifid the terminal lobe is always the largest. The





upper leaves have margins that are coarsely dentate and slightly wavy – they are often nearly as broad as long. The hairiness of the leaves is variable, although there are usually a few hairs along their lower mid-veins.

Purple Wild Radishes

Wild radish occurs throughout California. Seed leaves are broad with a deep leaves are irregularly lobed and may have separate lobes at the base of the leaf blade. Seedlings resemble mustards in the genus *Brassica* but are duller green and rougher textured. Mature wild radish is an erect annual, usually 2 or more feet high, and branched in the upper portion. Leaves vary in size and shape. Lower leaves are deeply divided with leaflets arranged on both sides of the leafstalk and a large, rounded terminal segment. Flowers range in color from white to purple to pink or light yellow brown with streaks of different colors. Seedpods are elongated and pithy or spongy.





Non-Native Plants

Anagallis arvensis (Scarlet Pimpernel)

The stems are smooth and square. The plant usually has many branches and is sprawling. Each flower has five sepals, five petals and five stamens. The seeds mature in a round ovary that opens by the top coming off like the lid of a jar. Scarlet Pimpernel is an annual. It can germinate almost any time of the year. Depending upon location and moisture it blooms from March to September. Scarlet Pimpernel is not native to California. It came from Europe and was probably accidentally brought here by early settlers. The plant is toxic to both humans and animals. The flowers open every day in the sunshine and close again at night.





Bromus ssp (Brome) - Downy brome plants stand from 5 to 60 cm tall and are covered with soft hairs at all growth stages. The stems of a mature downy brome plant grow in large tufts. The flat leaves are 4 to 16 cm long, 2 to 4 mm wide, and light green. The ligules are membranous and short (3 mm). Figure 1 illustrates the leaf sheath of a small downy brome plant.





Bromus madritensis ssp (Foxtail Chess)

-is characterized by a brush-like inflorescence that becomes a distinctive purplish color at maturity. Seedlings are bright green and hairy. At maturity foxtail chess is erect with a panicle of ascending florets on short pedicels arranged roughly equally around the peduncle. Young plants are green, but foliage and inflorescences become purplish at maturity, fading to light tan during the months following senescence. Areas of foxtail chess infestation can be recognized at a distance by their purplish color.





Carduus pycnocephalus (Wild Oats, Soft Chess) - can be referenced under the symbol CAPY2. The botany hierarchy of the Italian plumeless thistle is classified within group Dicot of the Asteraceae family. The growth habit of the Italian plumeless thistle is found growing as a Forb/herb. This plant is considered Introduced to the United States of America. The Italian plumeless thistle is an Annual plant which means its life cycle lasts only one year, from seed to blooms to seed.



Centaurea melitensis (Tocalote) - The flowers are ½ inch (1.3 cm) wide and are surrounded by "cobwebby" bracts with 0.4 inch (1 cm) long, tan spines with reddish, pinnately spiny bases. The upper leaves are linear. The similar weed *Centaurea solstitialis* has longer, yellow spines.





Cortaderia jubata (Pampass Grass)- is a large tussock grass with most of its leaves near the base and narrow, attenuate blades. The panicles are large, terminal, and plume-like. Spikelets are several flowered, with internodes of the rachilla jointed, the lower part glabrous (smooth), the upper part bearded. Glumes extend beyond the lower florets. Plants are dioecious (staminate and pistillate flowers on different plants), with male spikelets covered with long hairs.

Distinctive features of C. jubata are huge nodding pinkish or purplish flower plumes (later turning creamy white), and dark green 1-cm-wide drooping leaves with razor-like margins. Flower stems rise up to 3 times higher than the clump of foliage. Thiscontrasts with another commonly planted pampas grass, C. selloana, which has narrower, blue-green leaves and glistening white plumes when mature. The most important feature of C. jubata as a weed is that it produces abundant seeds annually and establishes rapidly on bare soil, while C. selloana sets relatively few seeds and rarely becomes naturalized (Conner 1971).





Ehrhartat calycina (Veldt Grass) - is a tufted perennial to 80cm tall. The inflorescence is a drooping erect panicle of reddish-purple flowers, 7-22cm long. Flowers in spring. It is a widespread weed of roadsides and bushland on sandy soils, from Geraldton to Esperance and is especially common on the Swan Coastal Plain.





Erodium ssp (Filaree) - are winter annual members of the geranium family. Filaree has a shallow coarse tap root. The feather like compound densely-haired leaaves form from a prostrate basal rosette. The leaves consist of 5 - opposite leaflets which are deeply cut. The leaves of white stem filaree are broader and the leaflets are less deeply cut than red stem filaree. Stems are also hairy, grow low and spreading. The flowers of filarees form umbrella shaped clusters which are pink to purplish in color and contain 5 petals. Filaree reproduces by seed.





Foeniculum vulgare (Fennel)- is an aromatic biennial with soft, feathery, almost hairlike foliage. The lacy, finely dissected leaves have swollen petioles (leaf stems) that clasp the main stalk to form an edible structure that is what is commonly referred to



incorrectly as the bulb. The plant gets about 2 ft (0.6 m) tall in its first growing season. In the second season, Florence fennel produces flowering stems that stand a foot or so taller and support showy flat-topped umbels of little golden flowers. (An umbel is an umbrella shaped cluster of flowers in which the individual flower pedicels (flower stalks) radiate from a common point on the main stalk.) Fennel has an elongated root that resembles a carrot. All parts of Florence fennel have a sweet, licorice fragrance reminiscent of anise, tarragon and chervil.





Hirschfeldia incana (Shortpod Mustard) Is an annual that grows to 1.0 meters (3.3 feet) high by 0.5 meters (1.65 feet) wide and prefers sandy loam soil with a pH ranging from acid to alkaline and partial to full sun with little to moderate amounts of moisture. This plant has hermaphrodite flowers from May to October and is pollinated by bees.







Marrubium vulgare (Horehound) - The small flowers are borne in whorls at the leaf axils. The 1.5-inch (3.8 cm) long leaves are oval, opposite, petiolate, and deeply wrinkled. The square stems are greenish white and covered in woolly hairs. This cultivated, medicinal herb was introduced from Europe and has become naturalized.





Rumex crispus (Curly Dock)- Curly dock, a perennial weed, usually grows in wet areas and is frequently associated with overwatering or standing water in low areas. A member of the buckwheat family, it has characteristic jointed stems, membranous sheath at the leaf base, and usually swollen nodes. The mature plant has stout stems and can be 2 to 5 feet (0.6 - 1.5 m) tall. Succulent cotyledons are 3 times long as they are broad. Young seedlings vary in color, from entirely green to being red tinged in

the cooler months. The long, loosely branched inflorescence has green flowers that are not showy. The stem dies back in the fall while a basal rosette of leaves forms. Curly dock can grow from cuttings of its thick and fleshy taproot. Seeds may be dispersed by wind and water.







Sysymbrium officinale; Sisymbrium orientale (Wild or Hedge Mustard; Oriental Mustard)- is an erect, branched annual or biennial 1'-2' high with pubescent stems. The leaves are alternate, pinnate, 2" to 5" long with a hastate terminal lobe. The upper cauline leaves have two basal, lanceolate, spreading lobes and entire to few-toothed margins. The flowers are in terminal racemes, with four sepals, four pale yellow petals to 3/8" long, and six stamens, four long and two short. The fruits are straight, linear, ascending-spreading unbeaked siliques to about 3-1/2" long that are on pedicels about the same thickness as the silique. Oriental mustard grows along roadsides and sidewalks blooming from April to July.







