

THE GENUS *CEANOETHUS*: WILD LILACS AND
THEIR KIN

CEANOETHUS, A GENUS CENTERED IN
CALIFORNIA AND A MEMBER OF THE
BUCKTHORN FAMILY RHAMNACEAE

The genus *Ceanothus* is exclusive to North America but the lion's share of species are found in western North America, particularly California

- The genus stands apart from other members of the Rhamnaceae by
- Colorful, fragrant flowers (blues, purples, pinks, and white)
- Dry, three-chambered capsules
- Sepals and petals both colored and shaped in a unique way, and
- Three-sided receptacles that persist after the seed pods have dropped

Ceanothus blossoms feature 5 hooded sepals, 5 spathula-shaped petals, 5 stamens, and a single pistil with a superior ovary



Ceanothus seed pods are three sided and appear fleshy initially before drying out, turning brown, and splitting open



Here are the three-sided receptacles left behind when the seed pods fall off



The ceanothus range from low, woody ground covers to treelike forms 20 feet tall

- Most species are evergreen, but several deciduous kinds also occur
- Several species feature thorny side branches
- A few species have highly fragrant, resinous leaves
- Habitats range from coastal bluffs through open woodlands & forests to chaparral and desert mountains

The genus is subdivided into two separate subgenera that seldom exchange genes, even though species within each subgenus often hybridize

- The true ceanothus subgenus (simply called *Ceanothus*) is characterized by
- Alternate leaves with deciduous stipules
- Leaves that often have 3 major veins (some have a single prominent midrib)
- Flowers mostly in elongated clusters
- Smooth seed pods without horns
- The majority of garden species available belong to this group

The leaves of *C. arboreus* clearly show the three major veins that run from the leaf base to the tip



The dense, elongated flower clusters of *C. arboreus* are typical of the group



These seed pods show no protuberances or horns on the top



Most native plant nurseries sell cultivars in this group. One of my favorites is *C.* 'Dark Star' a close relative to the wild *C. impessus* from the hills near Lompoc



Because 'Dark Star' comes from arid areas, the leaves are small and have a single prominent midrib or vein



‘Dark Star’ has the deep blue color so admired in the genus. The protruding stamens demonstrate the efficacy of bee pollination in this genus



Another interesting cultivar in this group is *C. griseus* 'Diamond Heights', which features variegated leaves. Such plants are sensitive to full afternoon sun and grow slowly.



One of the more unusual cultivars is *C. 'Gloire de Versailles'*, a summer bloomer with pale pink flowers. This one is based on the Eastern North American species, *C. americanus*



‘Gloire de Versailles’ is unusual for its pale pink flowers and deciduous growth pattern



Although there are many more available ceanothus cultivars, the rest of this presentation will feature naturally occurring species, many of which have been neglected

- Straight species are often just as fine in the garden as cultivars
- Most require excellent drainage, full sun, and no summer water when well established
- Most grow rapidly to maturity and fix nitrogen in the soil
- Most can be tip pruned to shape, and pruned heavily to reinvigorate when they grow old
- The following survey starts with species whose leaves have 3 main veins

Ceanothus arboreus, the tree ceanothus features large flower clusters, large leaves, and a tall stature. It is native to the Channel Islands



The popular tall cultivar called 'Ray Hartman' has a strong presence of *C. arboreus* in it



C. griseus, one of the coastal blue-blossoms, is usually grown for its semiprostrate form known as 'Carmel Creeper'



C. thyrsiflorus, the other coastal blue-blossom, often grows tall



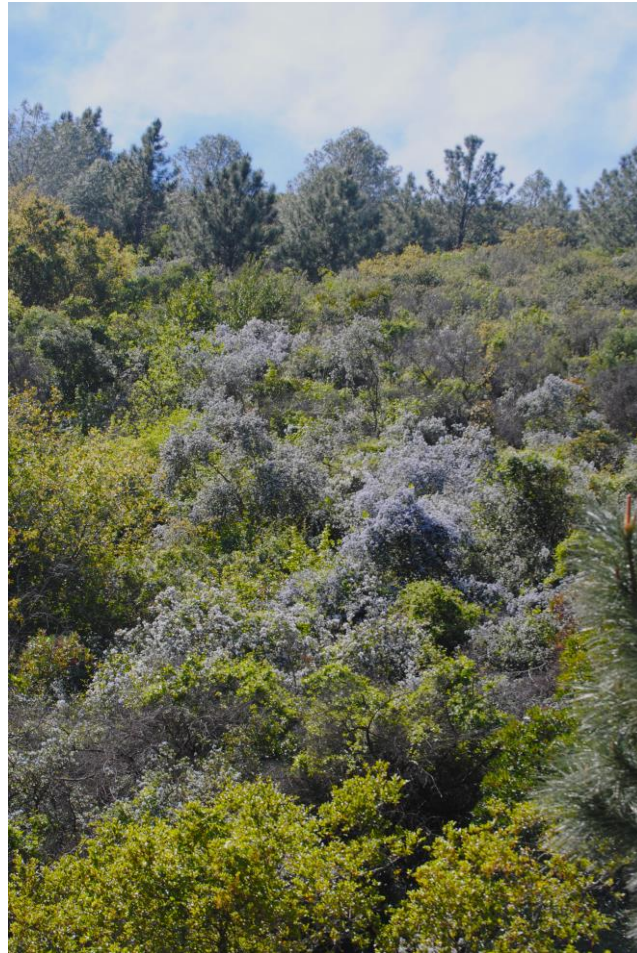
This treelike form of *C. thyrsiflorus* is typical of the Peninsula and Pt. Reyes



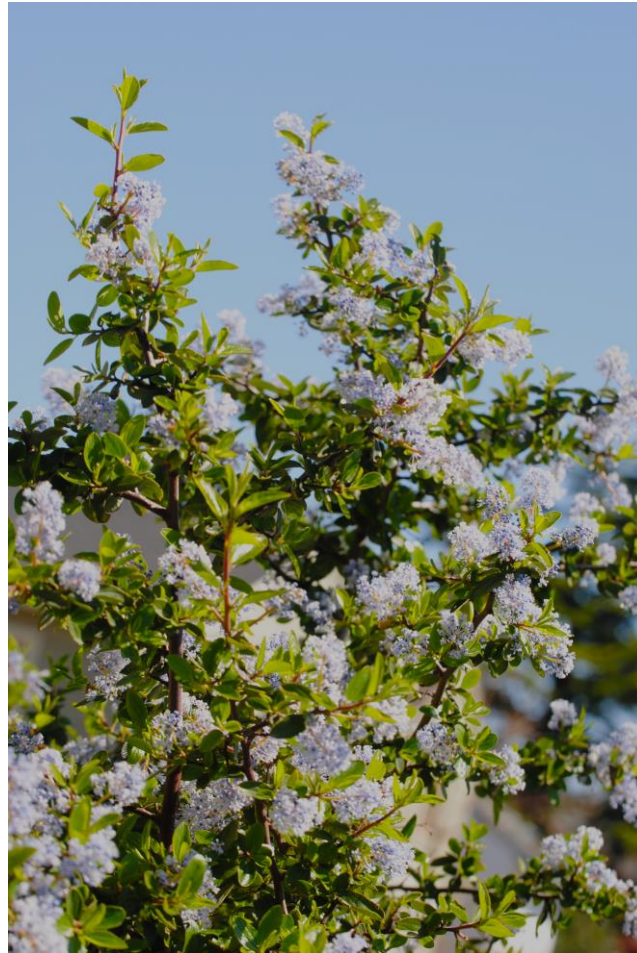
A popular cultivar of *C. thyrsiflorus* is known as 'Snow Flurry'



C. oliganthus sorediatus or jimbrush is a common shrub inland in the chaparral; you can find it abundantly on Mt. Diablo



Jimbrush features smaller, paler flower clusters



Jimbrush leaves easily show its relationship to the coastal blueblossoms



C. spinosus, the greenbark ceanothus, has even paler flowers on large multitrunked shrubs. It blooms very early in the chaparral of Southern California



Greenbark ceanothus features photosynthetic bark on the newer growth and thorny side branches



C. leucodermis, the white-thorn ceanothus, features showy masses of pale purple to snowy white flowers. It occurs inland in hot, dry chaparral



White-thorn leaves are especially broad



White-thorn, true to its name, has whitish bark and thorny side branches



C. cordulatus or snowbrush ceanothus is like a scaled-down version of white-thorn with spreading branches flexible to snow cover and is found in the high mountains



Another species with snowy white flowers is the tobacco brush, *C. velutinus*, found in montane chaparral



Tobacco brush is so named for its large, resinously fragrant and sticky leaves that curl along the margins



Also sometimes white flowered is deerbrush (*C. integerrimus*), noted for its winter-deciduous leaves



Deerbrush is a dweller along the margins of montane forests. Here you see a purple-flowered form



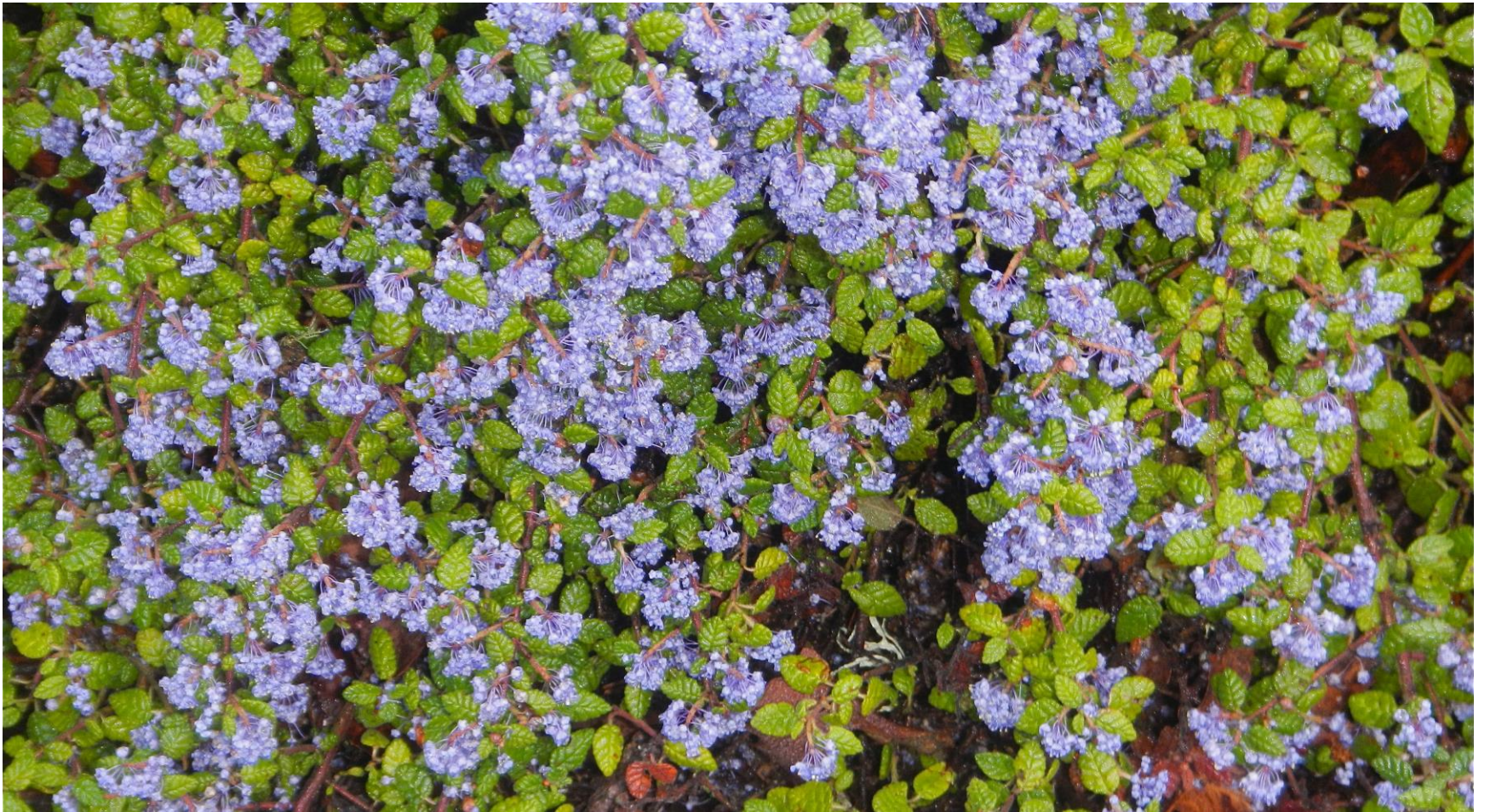
Deerbrush leaves are similar to many other species but the shrubs don't flower until much later in the spring than the others



We'll turn now to ceanothus with single-veined leaves; such species are often found where small leaves are important to prevent excess water loss. Typical of this group is *C. foliosus* or littleleaf ceanothus.



Little-leaf ceanothus forms low mounded shrubs with small clusters of bright blue flowers



The tiny leaves of little-leaf ceanothus are shiny, aromatic, and lined with glandular teeth



The prostrate branches of Hearst ceanothus (*C. hearstiorum*) is restricted to a small coastal area near the Hearst Castle. It is a garden favorite



Flowers and leaves of Heister ceanothus



Hearst ceanothus leaves are narrow and covered with warts or “papillae”



The vivid blue flowers of *C. papillosus* (wart-leaf ceanothus) are on a tall shrub that occurs in the Santa Cruz and Santa Lucia mountains



Wart-leaf ceanothus, like Hearst ceanothus, features narrow leaves with papillae. The two are closely related.



Now let's turn to the other subgenus known as *Cerastes* (the horned ceanothuses)

- The majority of *Cerastes* have opposite leaves with prominent, corky stipules
- The vein pattern on the leaf underside resembles a herringbone
- The flowers are often in smaller, rounded clusters
- The seed pods feature protruberances on top known as horns

These leaves show the herringbone vein pattern underneath and the prominent knobby stipules



Here's another example of a *Cerastes* with pairs of leaves and prominent stipules



The most widespread member of this group is buckbrush (*C. cuneatus*), making an early show with white flowers on Mt. Diablo and other areas of dry chaparral



Masses of buckbrush flowers make a fabulous late-winter show



Buckbrush leaves are supposedly wedge shaped and the reason for the specific epithet *cuneatus*



C. ramulosus (coastal buckbrush) is often lumped with *C. cuneatus*. Typical *ramulosus* has widely arching branches as seen here



C. ramulosus makes showy displays in Marin County chaparral, often with purple flowers



C. ramulosus in peak flower



C. megacarpus, the big-pod ceanothus, is similar to buckbrush but has larger seed pods and leaves that are alternate rather than opposite. It is abundant in coastal Southern California



Close view of big-pod ceanothus flowers



One more similar *Cerastes* species is the wart-stem ceanothus, *C. verrucosus* from the southern coast in San Diego County.



Wart-stem ceanothus like bigpod ceanothus has alternate leaves but of a somewhat different shape and has prominent, knoblike stipules seen here



One very restricted species, *C. ophiochilus* (Vail Lake ceanothus)--besides its rarity--has unusually narrow leaves and wispy clusters of white flowers



The majority of the remaining species in *Cerastes* feature hollylike leaves lined with prickly teeth. Here you see the glory mat, *C. gloriosus*, a coastal bluff species



Glory mat ceanothus comes in several forms including prostrate ground covers and medium sized shrubs with upright branches

- Besides the glory mat, few other species with hollylike leaves are cultivated
- Many of the “holly-leaved” ceanothus are relatively slow growing, and many are unavailable in the trade
- Many of these are narrow endemics, and many are difficult to differentiate
- The most widespread of this group is the prostrate ceanothus, *C. prostratus*, which has proven almost impossible to grow in our area

C. prostratus, also known as mahala mats, is common throughout the foothills of the Sierra and other mountains despite being difficult to grow. Instead, the last holly-leaved species, which is local, follows



Here you see the mounded shrubs of *C. jepsonii*, found on serpentine slopes in the North Bay but sadly lacking in the trade.



Jepson's ceanothus has the usual, hollylike leaves in pairs typical of this group. Here you see the backside of the leaves.



Jepson's ceanothus blooms in late March and April with various shades of deep or bright blue flowers and should be worth the effort to grow in gardens

