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The concept that we should only use plants which occur naturally in California is a romantic and idealized one that is attractive in concept but contradictory to most people's aesthetic goals in garden design.

Since California has a Mediterranean climate (no rain from April or May to October, with hot summers) the plants which evolved in the majority of the state are intolerant of summer water, and often go dormant in summer.

The resulting appearance is not what most people consider attractive.

To be objective, it is possible to create an interesting attractive garden of carefully chosen native plants but their management requires far more astute pruning, and irrigation knowledge than most gardeners (private or professional) have.

If you wish to use California native trees in your landscape, that use <u>must</u> be accompanied by a willingness to employ alternative irrigation equipment, vastly reduced irrigation frequency and knowledge about pruning tolerance.

With this rather negative statement, behind us shall we review the native trees which are available for our use? The best reference you will find is USDA Forest Service Research Paper 82/1978, *Distribution of Forest Trees in California* by Griffin and Critchfield (out of print).

In general, our many native oaks offer the most suitable trees for home gardens or street tree or industrial park use.

Quercus agrifolia, or Coast live oak

Called Encina by early Spanish settlers, it occurs from Anderson Valley on the north, primarily within 50 miles of the coast down to Baja California.

It is found up to 3,000' elevation in the northern part of its range to 5,000' elevation in the south.

There is a geographic form called *Quercus agrifolia oxydenia* found in eastern San Diego County, which is a very different tree than our local friend, coast live oak.

A similar, but brighter green species, *Quercus wislizenii*, is called interior live oak because it appears as isolated clusters of trees at the higher elevations of coast live oak stands and as pure stands in the lower slopes of the Sierra Nevada.

It is usually much slower growing than coast live oak with variable foliage, some with and some without spines.

One of our most elegant oaks is canyon live oak (*Quercus chrysolepis*). This is the most widely distributed of our native oaks in California. It appears on the east slopes of the central Sierra Nevada and down to the southern California islands where it hybridizes with island oak, *Q. tomentella*.

A neglected species, Island oak (*Quercus tomentella*) is my favorite native oak even though it appears only on the Catalina Islands. When young, it forms pyramidal, full canopy of dark, glossy green foliage with glaucas (grey) undersides.

In reasonably good soil it grows 12-18" per year, forming a 15' tall tree in 10 years.

A delightful small evergreen oak, is the barberry oak (*Quercus berberidifolia*) which usually makes multi trunked specimens of 10' tall, 15' spread of 50 years old. A great large shrub or small tree in a west or south exposure and a wonderful bonsai subject.

The deciduous native oaks which are most suited to the landscape are Black oak (*Quercus kelloggii*) (although it eventually becomes a 60' tall, 60' spread canopy) and Engelmann oak (*Q. engelmanii*) which appears primarily in sandstone croppings in eastern San Diego County but seems to thrive here if given well drained, acidic soil.

The secret of success for any of these oaks (and for any other plant) is an understanding of the plants soil type and irrigation method and frequency and atmosphere preferences.

A plant which occurs naturally in hot, open sandstone hills in eastern San Diego County like Engelmann oak will not survive in heavy clay in a partially shaded landscape.

A black oak which appears naturally on east facing slopes in gravelly soil in elevations of 2,000-4,000' will not perform as well in a west exposure in full sun in clay.

The problem most people encounter with native plants is "designing by wish" as in "I wish this plant would grow here."

I'm frequently asked whether digging a large planter hole in poor soil, and filling it with well drained soil won't allow the successful growth of an unsuitable plant.

The answer is, "you are wishing the plant to grow in soil it's not adapted for." Eventually, it will have roots in the native soil, whatever that is. California Native Trees in the Landscape June 20, 2012

Non oak native broadleaf trees which you should consider if you have a typical garden space include;

Lyonothamnus floribundus asplenifolius – Catalina Ironwood Aesculus californica – California Buckeye Cornus nuttallii – Pacific Dogwood Acer macrophyllum – Big Leaf Maple Sambucus caerulea – Blue Elderberry

Conifers to consider include:

Cupressus macrophylla – Monterey Cypress Cupressus forbesii – Forbes Cypress Cupressus abramsiana - Abrams Cypress Cupressus sargentii - Sargent Cypress Calocedrus decurrens- Incense Cedar Pinus coulteri - Coulter Pine Pseudotsuga macrocarpa - Big Cone Spruce

Large Shrubs which Can Form Tree-like Stature

Cercocarpus traskiae – Catalina Mountain Mahogany A 15-20' evergreen tree which is endemic to Santa Catalina Island where the entire

natural population has been reduced to a single plant.

Cercocarpus betuloides – Western Mountain Mahogany

Occurs through much of the state. It can reach 15-20' but is usually shrub-like in form with several main trunks.

Both of these species produce quantities of $1 \ \%''$ long spiral seed heads which appear silver in the afternoon light.

Ceanothus arboreus – Catalina Ceanothus

Can reach 25' tall with smooth grey bark.

It prefers a site with ocean influence with well drained soil, but in sand it is slower growing.

As it matures it assumes the character of a small coast live oak (Quercus agrifolia).

Arctostaphylos Manzanita 'Dr. Hurd'

Can grow (very slowly) to 8' if it survives the watermold diseases (*Phytophthora cinnamomi*) which killed the original parent plant of the cultivar.