

Native Blue Oaks

by Mary Anderson

The dominant oak species of our lower foothills is *Quercus douglasii*, the blue oak. In fact, the presence of this tree defines a plant community, the blue oak woodland, where many of us live.

This tree is one tough plant. It thrives in the shallow, lean soils of the foothills, and endures the seemingly endless hot dry summers. What are the features that allow it to establish and grow in these conditions?

First, from the acorn, it is primed to take advantage of every drop of moisture. Rather than waiting for spring to sprout, the acorn hardly hits the ground before it begins its root growth, taking advantage of the earliest rains and cooler weather. Most of the energy of the acorn is devoted to root development, with just a modest few leaves produced on the first year's shoot. This affords the new little seedling a chance at all the soil moisture available to it, without having to support a lot of leaf area.

This moisture conserving strategy is seen in the leaves, with the upper surface having a waxy protective coating, giving it the bluish cast for which it is named. The leaves are also proportionally smaller than the valley oaks that favor deeper soils, or the black oaks of a higher and slightly cooler elevation. Blue oaks can also go deciduous early, if the summer sears its way into a late hot fall. The trees are not dying, but concentrating energy into finishing their crop of acorns.

Blue oaks dominate the savanna annual grasslands right above the central valley, where they provide the major food source for grazers and rodents on the lower food web, and the birds and predators on the next rung up. In the blue oak woodlands, these trees are the foundation of a very rich community, ranging from the top predatory species such as the mountain lion, bobcat, even bears, the coyote and large hawks. Deer, raccoon, skunks, squirrels, jack rabbits, rodents and birds benefit from the abundance of the oaks. The adjacent mixed chaparral contributes many brush species that afford food and shelter for these animals, as well as a large assortment of invertebrates.

In the recent past the blue oak was regarded as a weed tree, and measures were taken to eliminate them, increasing the grasslands for cattle grazing. We live in a blue oak woodland that supports an unbelievable richness of plant species. I find rein orchids, orabanche, pipestems (or *Clematis lasiantha*), redberry, redbud, buckeye, elderberry, toyon, Chinese houses, clarkia, buttercups, houndstongue, and countless other beauties among the blue oaks. A friend, whose land was cleared for grazing, comes to photograph some of these plants, and wonders what used to be on their land before clearing.

Blue oaks are easily started either from acorns or seedlings available in tree tubes from a nursery. The main planting strategy is to protect them from browsing when they are young. I control the weeds around their base, mostly with a spring weeding, and then mulch them with those same weeds. A deep watering weekly, then after a year or so, monthly, will help them become established. I pound two 6-foot T-posts into the ground

about a foot out from the little tree, then put a stiff 2"x4" mesh wire fencing around to protect them. When they over grow the wire fencing, they can survive Bambi's nibbling and make it on their own.

Tucking blue oaks here and there on your property is a true gift to the future, to the critters with whom we share these hills, and to our children who will inherit this land. Let's leave it to them richer in resources than we found it!

Blue oak seedlings in tree tubes will be available at the California Native Plant Society's autumn plant sale. The Sierra Foothill Chapter will host the native plant sale on Saturday, October 17, 2009 from 9 a.m. to 1:00 p.m. at Rocca Park in Jamestown, CA.

Mary Anderson is retiring from her wholesale nursery business where she propagates native oaks and other native plants.