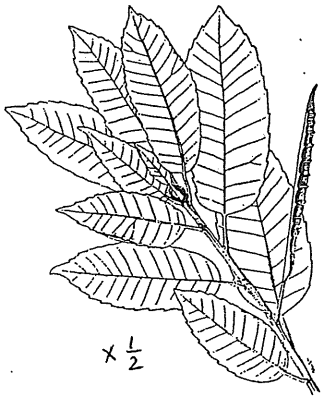
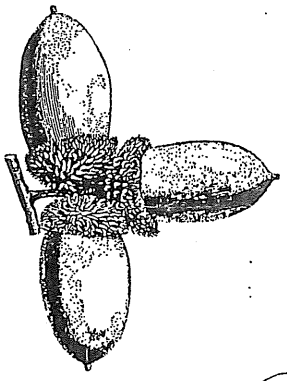
OAKS IN NAPA COUNTY

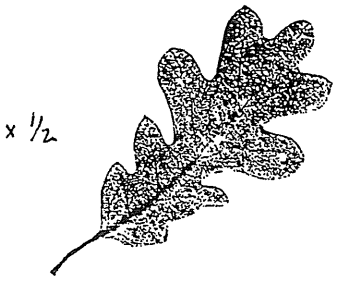
by Jake Ruygt and Joe Callizo

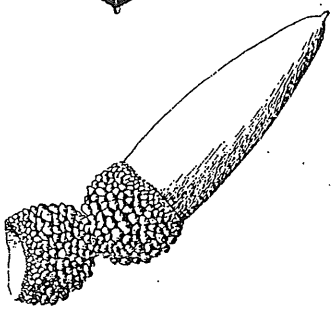


There are about 40 species (kinds) of native trees in Napa County. Of these the most prominent are the oaks which are represented in nearly every plant community with the exception of the marshes. Seven tree species, two shrub species, three shrub varieties, and occasional hybrids, or crosses, occur in Napa County. A close relative, Tan Oak, is also found here.

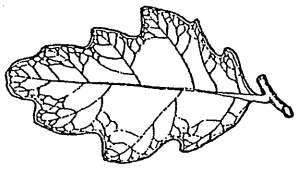


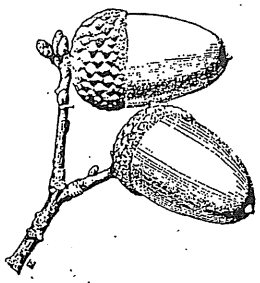
Tan Oak (Lithocarpus densiflora) is an evergreen tree with a conical crown and leaves that have prominent, parallel, lateral veins. In addition, its flowers are borne on erect clusters, where as those of the true oaks (of the genus Quercus) form drooping clusters. It is usually a tree of mid-elevation forests, but in some places, like high up on Mt. St. Helena, it is a component of chaparral, that is: brushland.



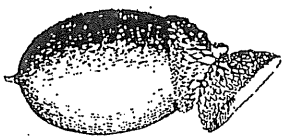


Among the most stately of trees is the Valley Oak (Quercus lobata). It is considered to be one of the largest oak species in the world. This is a deciduous tree (losing all of its leaves for the winter) of grasslands and woodlands, including streamside borders. It is still common in the Napa Valley, but can be better appreciated in its natural setting in less developed areas like Pope and Capell Valleys. Its leaves are characteristically deep-cleft, blunt-lobed, and dark green on their upper surfaces.

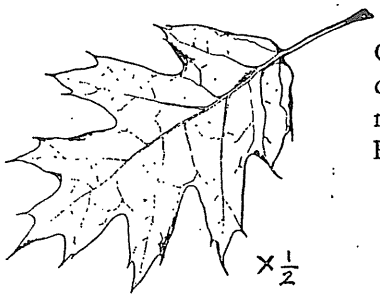


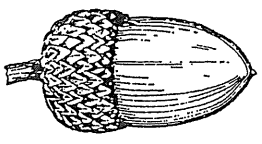


Slower growing and forming woodlands on grassy slopes is the Blue Oak (Q. douglasii), another deciduous species. This tree is most numerous on the east side of Napa Valley, for example, along the Silverado Trail and in the eastern half of the county particularly around Lake Berryessa. Its leaves of bluish color, shallow clefts, and blunt lobes make it easy to identify.

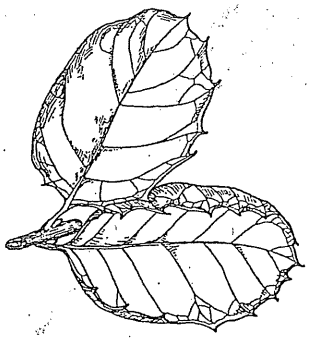


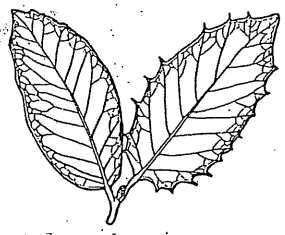
The least common and least known of our deciduous oak trees is the Oregon Oak (Q. garryana). This species resembles Valley Oak in its leaf shape, and Blue Oak in its bark, which is typically of finer texture and lighter color than that of the former. It is found in woodlands mostly west of the Napa Valley at mid to upper elevations. There it often forms groves with crowns nearly touching or overlapping. An understory of the grass, California Fescue (Festuca californica), is almost always present in this plant community.

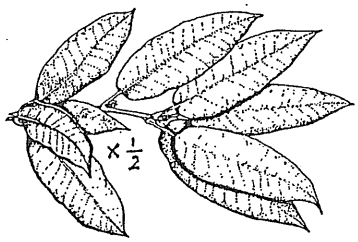


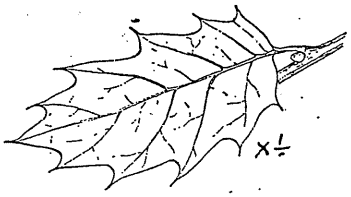


Found both in forests and woodlands is Kellogg's or California Black Oak (Q. kelloggii). It has deciduous, deeply cleft leaves with sharp pointed lobes. This tree is common at middle to higher elevations in Napa County, for example, on Howell Mt. and along Monticello Road above Wooden Valley.

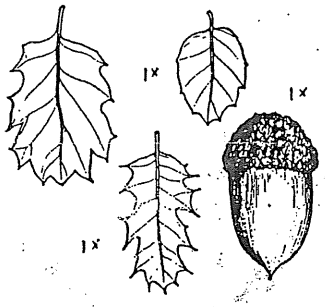




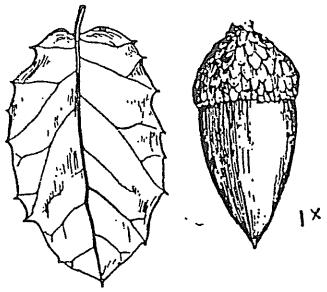




Oracle Oak



Scrub Oak



QUERCUS AGRIFOLIA
VAR. FRUTESCENS

The most common tree in Napa County is probably Coast Live Oak (Q. agrifolia). It is a component of forests, woodlands, and riparian borders. It will even occur sporadically in chaparral. This evergreen, dense, round-headed tree has leaves that are dark green, slightly cupped downward, and have spine-tipped margins. In addition, they tend to be round to egg-shaped and hairy below near the veins. This species is the most common live oak in the western half of the County.

Largely replacing Coast Live Oak as we drive east toward Lake Berryessa is another evergreen tree, Interior Live Oak (Q. wislizenii). The two species are generally similar in habit and form, but the latter has leaves that are nearly flat and oval shaped instead of cupped and roundish and are shiny below.

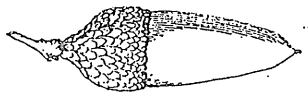
The least common of our evergreen oaks is the Maul, or Canyon Live, Oak. (Q. chrysolepis). This species is usually found in steep canyons or at upper elevations, for example, around Angwin and on Mt. St. Helena. It becomes the dominant oak species above 2000 feet on the slopes of the latter. Its leaves are uncupped and oval like those of Interior Live Oak, but light green above and pale yellowish or grayish beneath. Those of juvenile shoots have toothed margins, where as those of mature trees are mostly untoothed.

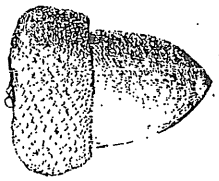
Hybrids between various tree oak species are sometimes found. Named ones include Oracle Oak (Q. X morehus), a cross between Interior Live Oak and California Black Oak, with shiny, thickened (leathery) leaves which are deeply toothed and almost completely winter deciduous; Chase Oak (Q. X chasei), a hybrid of Coast Live Oak and California Black Oak, with leaves that are thickened and hairy at the veins below but deeply toothed, sharp pointed and almost completely winter deciduous; and Epling Oak (Q. X eplingii), a cross between Blue and Oregon Oak, with leaves quite variable. Unnamed hybrids occur between Blue and Valley Oak, with various intermediate forms.

In addition to the trees discussed above, there are a number of oaks in Napa County that are shrub-like in form. Scrub Oak (Q. berberidifolia) is a common component of chaparral except in areas of serpentine (a rock high in magnesium and low in calcium). There it is replaced by Leather Oak (Q. durata). Both are evergreen, but the latter has leaves that are cupped downward, densely hairy below, and has branched hairs on their upper surfaces. On the other hand, the leaves of Scrub Oak tend to be flat, shiny and hairless above while paler with some hairiness on the under side. Hybrids occur between these two species (e.g. near Four Corners west of Angwin) and between either of them and Oregon Oak. Occasionally Scrub Oak is found in oak woodlands where it can persist in the understory for many decades, growing into small trees.

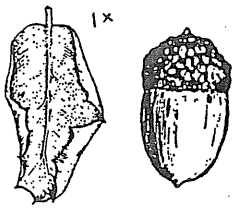
There are also in Napa County shrub forms of Coast (Q. agrifolia var. frutescens), Interior (Q. wislizenii var. frutescens), and Canyon (Q. chrysolepis var. nana) Live Oak. All are evergreen and have leaves very much like those of the corresponding species. They occur typically in chaparral.

For more info., call J. Callizo, 965-2225; or J. Ruygt, 253-1839.

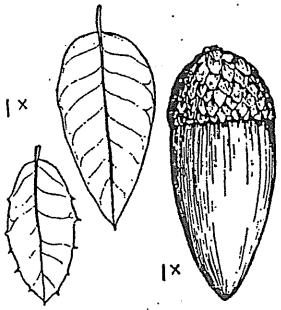




Oracle Oak



Leather Oak



Q. WISLIZENII
VAR. FRUTESCENS