# **News** from the

Volume 23, No. 2, December 2022 Email to: <u>friends@fbbfs.org</u> Website at: <u>www.fbbfs.org</u>



# Meet the Inhabitants



#### Oaks Quercus spp

We have highlighted oaks before, but with so much emphasis recently about them as a keystone species in our local ecosystems, we thought it would be good to write about them again. Oaks provide food and habitat for thousands of species, including insects (like the gall wasps mentioned at right), birds, and mammals, not to mention bacteria and fungi. They also capture carbon and air pollutants, prevent erosion, and reduce heat absorption in areas they shade. They are easy to grow, require little water once established, and tolerate full sun as well as a bit of shade.

Oaks range from shrubs to large trees, and can be found from rich loam valleys to dry Chaparral slopes and foothill woodlands. They can be deciduous or evergreen. The leaves on some species are lobed, on others they are oval. Different species blossom within the period of March to May, with some fruits maturing in one year and others in two. Pollen is produced in strings of tiny, yellowish, male flowers called catkins, with one or a few tiny female flowers nearby. The fruit is a pointed nut with a scaly cap, the familiar acorn. Coast live oak is the most common species in our area and it has stiff, oval leaves whose edges curve down (photos above). However, oaks hybridize with abandon, so many show intermediate or a combination of characteristics, which makes species identification difficult at times.

Mark Acuna wrote: Oaks formed the core of Tongva life. Prior to the invasion of the Europeans with their cattle, swine, and

# **Ecological Walk**

We are delighted to announce that the Friends have donated \$5000 to the BFS to help with establishing the Ecological Walk along the Foothill frontage.

The Claremont Garden Club is also moving forward with plans to create two native plant demonstration gardens at the east end of the Walk. If you would like to help with putting in the hardscape or the plants, please email them.

If any of you would like to help fund the Walk as well, please let the Director know.



This "oak apple" is the result of a tiny wasp (*Andricus californicus, photo by Jonathan Wright*) injecting eggs into a stem. The larvae cause a tumor-like growth that nourishes and protects them. Eventually adult wasps emerge and the gall becomes hard and brown. The link above provides a lot of fascinating information.

goats, the great oak forests were the glory of the Los Angeles, Orange County basin. Today only patches remain as reminders of the grand Tongva oak world.

No other plant occupied so central a position to Tongva life as the oak. The oak was the central food plant: *Quercus agrifolia* was known as "wet", *Quercus chrysolepis* as "wiaht", *Quercus dumosa* as "pawish", *Quercus kelogii* as "kwingili", and *Quercus lobata* as "sheve". The acorns of each species also had separate names. In early summer, the men and women of the villages began their annual inspection of their oak groves. Each village had designated groves which they tended and maintained. The men trimmed out old, broken, diseased branches. Women and children weeded out unwanted ground plants. The villagers carefully burned off grasses to clear the oak lands, to produce fertilizing ash, and to provide better soil for their beloved trees.

Each family harvested up to 500 pounds of acorns each year. In autumn, the villagers traveled to their groves to gather the ripe acorns, making temporary camps. The men beat the acorns down with sticks and the women gathered the felled acorns in large conical baskets. The acorns were stored in specially constructed storage units called "tsoahkah". The acorns were dried, cracked open, and peeled when needed. The acorn meat was pounded into a fine meal and then leached to eliminate the toxic tannin. The ground, leached meal was cooked into an acorn porridge or baked into small cakes. An acorn soup was also sometimes made.

Elaborate ceremonies, dances, and songs celebrated the acorns and the gathering times. Stories of how and why the different acorn shapes and sizes came into being were common throughout California. The Tongva sing of a time when the acorns were five spirit sisters who had to weave new basket caps before entering the physical world. Each sister wove a distinct cap and these caps became the different acorn cups.

A side product of the great tree was the large, round gall produced when the California gall wasp laid her eggs in the stem. The gall was dried and ground into a fine powder and used for eye infections. The galls were also painted and decorated and attached to head sticks for ritual dances.

The Tongva were truly an Acorn People.

#### **Greetings from the BFS Director**

I would like to wish the greater BFS community Happy Holidays! Like many of you, this is the time of the year when I like to reflect on what I am thankful for. What I have been most thankful for recently is the reemergence of the BFS volunteer program, which, until recently, has been limited by the ongoing COVID pandemic. The program is led by Nancy Hamlett, the BFS volunteer program coordinator, and represents one of my favorite links between the





BFS and the greater Claremont and Pomona Valley Community. The work by the volunteers is invaluable allowing us to complete tasks that would be difficult, impossible, or costly without the generous help of our community volunteers, such as clearing the trails that have not seen much attention since before the pandemic (photo left), and rooting out cattails in pHake Lake to improve access (photo below). While I am immensely grateful for everything we complete, my favorite part is getting to chat with a diversity of people about southern California ecology and their connection to our home. During the last volunteer day, I got to chat with high school students, students from a variety of local junior colleges, and got to concoct plans with a high school

teacher on how we might combine efforts to provide opportunities for students to engage in a restoration ecology project.

If you are interested in volunteering, we offer different opportunities from 10 AM to noon on the first and third Saturdays of most months. You can find more information at bfs.pomona.edu/volunteer. Registration is required.

Wallace Meyer "Marty" Director, Robert J. Bernard Field Station













## **Colorful Fruit!**

Clockwise from left: Toyon in November and December, hollyleaf cherry in early summer, Nevin's barberry, redberry, coffeeberry, cactus in summer, golden currant in spring.

Still no word from the colleges about their promise of permanent protection for the center part of the BFS (the Temporarily Restricted Property , the TRP.



#### **Tours of the BFS**

Community and school groups can arrange to take tours. If you are interested in bringing your group to the BFS to learn about what is there, contact the Director: 909-398-1751 wallace.meyer@pomona.edu

#### **BFS Volunteer Days**

Covid permitting, the first Saturday of the month, 10:00 am until noon, followed by a tasty pizza lunch. If you have questions or want to be added to the volunteer list, please contact the BFS Volunteer Coordinator: Nancy Hamlett (909-964-2731) (hamlett@hmc.edu)

#### **Claremont Garden Club**

The Club is free and open to everyone interested in any type of gardening. Meetings are second Wednesday of most months, 6:30-8:30 pm in the Louise Roberts Room at the United Church of Christ, 233 Harrison Ave, Claremont. Talks start at 7pm. For more about the club: www.claremontgardenclub.org info@claremontgardenclub.org

#### **Friends website**

www.fbbfs.org

for past newsletters and a map showing which colleges now own which parts of the Field Station.

City of Claremont: www.ci.claremont.ca.us P.O. Box 880, Claremont, CA 91711 City Clerk: 399-5460 Claremont Colleges: www.claremont.edu The Claremont Courier : (909) 621-4761 114 Olive St, Claremont, CA 91711

The Friends is a non-profit, grassroots organization

"Dedicated to Education and the Environment"

### The BFS: A Facility of the Claremont Colleges

#### How big is big enough?

A field station is land left in its natural state for use in the study of complex interactions between plants and animals. The usefulness of such natural laboratories depends on size and shape. Extinctions occur frequently in small areas, due to smaller populations. Narrow shapes increase the amount of pollution by noise, air, water, and pesticides from surrounding areas, and increase the chances of competition from exotic (non-native) species. The current 85 acres from College to Mills is just large enough to maintain reasonable stability in the existing ecosystems. The center bit of the BFS alone, which is all that is currently protected, would not be sustainable if Harvey Mudd, Scripps, and Claremont Graduate University build on the parts they have now purchased.

#### Who uses it?

The BFS is used by Claremont Colleges faculty and hundreds of students every year, as well as by many schoolchildren from Claremont and the surrounding areas. It has also been used by college classes from as far away as Long Beach, by scout troops, and by members of the public and for research by other institutions.

#### What's there?

There are over 30 acres of the fast-disappearing coastal sage scrub community along with a number of species of state or federal concern. There is a stand of oak woodland in the north where water wells up along an earthquake fault, there is annual grassland slowly returning to coastal sage scrub in the east, and there is a one-acre, man-made lake excavated in 1978 which is a sanctuary for western pond turtles displaced by development.

→ Since much of Claremont was originally covered with coastal sage scrub, it is a fascinating window into our past



"A tour of the property readily convinces visitors of the importance of keeping such a beautiful expanse of land, shrubs, and trees for scientific purposes." Robert J. Bernard in "An Unfinished Dream" pg 708