

News from the

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**FRIENDS OF THE
BERNARD
BIOLOGICAL
FIELD STATION**

The March Silent Auction

Although the Folk Music Center had to close because of coronavirus restrictions soon after we had set up the auction display in the window, most of the items found a home. Those that didn't will be part of the 2021 auction. Many thanks to all of you who left a bid for your support for the FBBFS!

Meet the Inhabitants



Western Toads

Anaxyrus boreas

This toad, like most toads, walks rather than hops, and lives in burrows. They are generally nocturnal and so are hard to find. Adults range from 2 1/2 to 5 inches long, and are greenish, tan, reddish brown, dusky gray, and yellow on top with a light-colored stripe down the middle of the back and a pale throat. They have rusty-colored warts, usually located on dark areas. There are surface glands which can produce a more or less poisonous substance which deters some predators (but not

others who find them quite delicious!) and can be harmful to pets. These toads are generally quiet, with a sound likened to that of chicks peeping (a recording of their sound can be found at CaliforniaHerps.com).



Sightings



- ✓ *Bombus crotchii* (Crotch's Bumble Bee), a candidate for state endangered species status. Two queens were seen on the Black Sage by the Redford Conservancy at the end of our March. This is the first time we've seen this species at the BFS!
- ✓ A good crop of berries on the large Nevin's barberries growing in the fence near the Dartmouth light
- ✓ Purple phacelia contrasting with the last of the yellow amsinckia
- ✓ Mourning doves cooing
- ✓ Lizards scurrying, catching insects
- ✓ Orange dragonflies darting down to the lake surface, laying eggs
- ✓ Spring mushrooms and gold-backed ferns shriveling in the first of the summer heat

Western Toads historically ranged from north central California through Baja, and from sea level up to 11,000 ft. However, a number of populations have now disappeared or are in decline, most likely due to destruction of their natural environments. They mate somewhere between January and July. The females lay two strings of eggs (up to 16,000 per female!) embedded in a jellylike matrix at the edge of a body of water. The dark brown, one inch tadpoles hatch and graze on the algae in the water. It takes a couple of months for them to develop into froglets. At the BFS, mating takes place early in the year. Although a few are found around the edges of the lake, the vast majority of tadpoles (top photo) inhabit the new vernal pool and must metamorphose before the pool dries up in late spring (these are really small to start out with, as you can tell by the fingertip in the bottom photo). When they are only about an inch and a half long, the tiny toads walk into the coastal sage scrub and find or make a burrow to inhabit. They catch an assortment of invertebrates with their sticky tongues and eventually return to the vernal pool to lay their eggs.



Toyon

Heteromeles arbutifolia

(repeat of article by Tongva member Mark Acuna)

Also called California holly, this small evergreen tree has long, leathery, dark green leaves with small teeth along the edges. Groups of small white flowers appear in summer, followed by bright red berries which are a major food source

for birds and small mammals. Californians call it Toyon or Holly Berry (giving Hollywood its name). The Tongva called it Ashuwet.

The Tongva celebrated the cold times of “Achocheva” throughout the greater Los Angeles Basin when they withdrew into their homes and told stories to their children. It was the great season of mending, learning and withdrawal from the outer world into the spiritual world of “Coyote Tale” time. In spring the world would renew itself and the people would celebrate. But now in the cold times, in the months of “Whistling Wind” and “Cold and Last Hunts” the people rejoiced in the harvesting of the red berries of Toyon which brightened the cold dark days of winter for the Tongva as they do for those who pass by the entrance to the BFS.

Toyon provided food, medicine, tools, dye, and ornaments. The bark and the leaves made a tea for stomach pains, produced a seasonal tonic and a wash for infected wounds. Mashed leaves were applied to sores. Pulverized flowers were steeped to make a medicinal tea which the women drank. The berries produced a dye, as did the bark which was used to dye fish nets. The berries were eaten fresh, roasted, or boiled and baked. Fresh berries made a refreshing cider. Wood was turned into fine arrows, awls, wedges, scrapers, spoons, mashers, and stirrers, and hair sticks decorated with Flicker feathers for the men.

(Editor's note: An excellent garden shrub, slow-growing to 10 ft tall and wide, full sun to a little shade, very low water. Flowers in early summer, berries in fall. Attracts birds and bees.)

Still no confirmation that the colleges have finally permanently protected the center 45 acres of the BFS (the Temporarily Restricted Property in the lawsuit settlement) as they promised to do immediately after the eastern 36 acres were sold to Pitzer, Scripps, and Harvey Mudd in 2015.

Help Make Our Vision for an Ecological Walk a Reality!

The Field Station and the Friends have a vision for an ecological walk along Foothill just outside of the BFS fence. More than that, we have a plan, too! The purpose of this project is to develop an interpretive “ecological walk” along the sidewalk in front of the Bernard Field Station (BFS): first to provide an opportunity for community members to learn about local ecosystems and native plants and, second, to illustrate how to create a beautiful and sustainable landscape with local native plants. This will complement the natural appearance of the Foothill Boulevard improvement project landscape and be an educational opportunity available to all, free of charge. You can see a fuller description of the project in the [December, 2019 newsletter](#).

The Claremont Garden Club Board voted to donate \$2000 towards this project!

We still have a long way to go, so if you have any suggestions for other funding opportunities we could pursue, or if you would like to donate to the project, or sponsor a section, please let us know as soon as you can by contacting Sue Schenk at sschenk9@gmail.com.

BFS Director's Invitation

I appreciate this opportunity to wish the BFS community well. I have been thinking of the greater BFS community for many months as we have done our best to limit the spread and impact of the COVID-19 pandemic, and I also want to clearly announce my support of the Black community and others that are actively fighting against systemic racism and other inequities, especially faculty, staff, students, and community members from the numerous institutions across southern California that represent the BFS community.

In these challenging times, I have been trying to reflect on how I may best support my community. With a focus on the BFS, I have been thinking about how I can: (1) create on-line scientific learning experiences for K-12, college and community members to enhance “access” when restrictions are in place or when few opportunities exist to visit the BFS, (2) offer volunteer opportunities as restrictions loosen to allow us to work towards supporting native ecosystems, and (3) build a stronger BFS community. However, I welcome suggestions from the BFS, Claremont, and greater LA Community to recommend ways to how I can best support you.

While I intend to continue to work hard at addressing the many urgent environmental issues facing our society, I also stand committed to help end racist policies, and create urgent social changes required to build equity and compassion in our community, nation, and world.

With love, and in solidarity,
Wallace Meyer “Marty”

Director, Robert J. Bernard Field Station

<https://www.facebook.com/BernardFieldStation>

Instagram: [bernardfieldstation](#)

More Spring/Early Summer Photos

(butterfly, delphinium, thistle, toad, bee photos from Nancy Hamlett)



Top to bottom

Left: Lotus hairstreak, Bernardino dotted blue, wild cucumber, centaury, elderberry

Middle: Checkered white, Painted lady, phacelia, suncup, California thistle

Right: Delphinium hybrid, amsinckia, Matilija poppy

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

First Saturday of the month, 10:00 a.m. until noon, followed by a tasty pizza lunch for the volunteers. 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

Free and open to everyone interested in any type of gardening. Meetings are second Wednesday of most months, 6:30-8:30 pm at the Napier Center at Pilgrim Place, 660 Avery Rd. 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