News from the

FRIENDS OF THE BERNARD BIOLOGICAL FIELD STATION

Volume 19, No. 2, November 2018

Email to: friends@fbbfs.org

Website at: www.fbbfs.org

An updated timeline and FAQ sheet are included in this issue. Let us know if you have any questions.

Meet the Inhabitants

Redberry

Rhamnus crocea

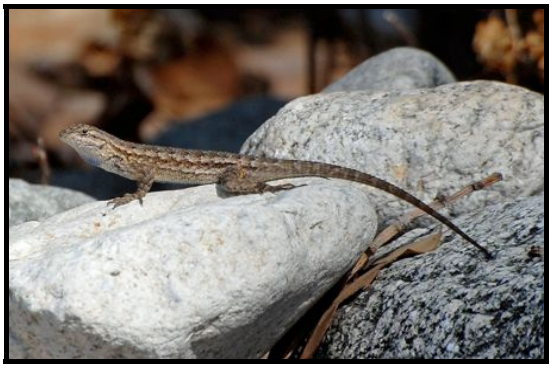
This plant, with its bright red berries, can be found along dry washes and canyons in coastal sage scrub, chaparral, and oak woodlands, and of course, at the BFS. Redberry is a woody shrub growing about 6 ft by 6ft, with gray-brown bark and angled branches with stiff twigs. The evergreen leaves are quite small, under ½" long, oval, thick, with tiny teeth and a somewhat rounded or indented tip. The flowers are tiny, with no petals but with four yellow sepals, and they occur in small clusters. The plants are either male, with flowers that produce pollen, or female, with flowers that produce eggs. When insects carry pollen to female flowers, red berries, like the ones in the photo, are produced.

Redberry was important in many ways to the native people who used to live in what is now Claremont. The Gabrieleno-Tongva call this shrub "Hunarkwahah" or "Bear, he eats this" because, in spring, bears feast on the blossoms and in the fall, on the berries. For the Tongva, the berries provided a flavoring when pounded into meat, fish, and quail.

Sightings

- ✓ Autumn color of the willows
- ✓ Regrowth in the burned areas
- ✓ Algal bloom in the lake
- ✓ Coots and ducks gliding
- ✓ Turtles and frogs diving
- ✓ Rabbits munching and scooting
- ✓ Masses of acorns
- ✓ Lizards rustling in leaf litter
- ✓ Bees busy on yellow daisies of pinebush and scalebroom
- ✓ Ripe, dark fruit on hollyleaf cherries
- ✓ Toyon dripping with clusters of red berries
- ✓ Insect galls on oaks
- ✓ Encroaching cattails
- ✓ Fluffy coyote brush seeds
- ✓ Deerweed and sagebrush drying out, losing leaves
- ✓ July bloom on white currant

Redberry is also a medicinal plant. Father Juniper Serra called this shrub “the Sacred Bark” because of its many uses, especially as a cathartic. The Tongva boiled roots and bark to make a decoction for internal soreness, colds, and coughs. They inhaled the fumes from burning leaves for headaches and for rheumatic pain. They pounded ripe berries to make a poultice to apply to sores, and used the sap to cure warts and ringworm.


Two Common Lizards

The Southern alligator lizard (*Elgaria multicarinata*, left, photo by Jonathon Wright) and the western fence lizard (*Sceloporus occidentalis*, female middle, male right, photos by Nancy Hamlett) are two of our most common lizards, both at the BFS and in our home gardens.

Alligator lizards are native along the coast from Baja to Washington state. They have a body length of 3-7" with a longer tail. They can live as long as 15 years and will regenerate a tail if they lose it in an attack, although the new tail tends to be shorter and thicker than the original. They can be brown or gray, sometimes greenish or yellowish, often with red patches in the middle of the back, and they almost always have 9-13 dark bars across the back.

They are found in grasslands, sage scrub, the burbs, and elsewhere, usually under plants, rocks, logs and other cover. They generally lay two clutches of eggs a year and the females guard the nest. They eat assorted arthropods, slugs, small mammals and birds, and even other lizards. They have a nasty bite.

Western fence lizards are native not only to the same areas as the alligator lizard, but to Arizona, Idaho, and Nevada. They are a bit smaller than alligator lizards and generally darker, with less obvious stripes. The males have a bright blue patch underneath giving them the nickname of “blue bellies”, and often have yellow undersides to the legs. Females and juveniles lack this bright coloration. They like to sun themselves which means they are easily seen but their fast reflexes help them avoid become dinner for predators, as do their tendency to bite and defecate when frightened. They can alter their color from light to dark grey, probably to regulate heat absorption. They mostly eat small arthropods including the mosquitos that plague us. They lay one to three clutches averaging eight eggs and begin breeding when two years old. Like most other lizards, they tend to hibernate during winter.

We are still asking:

If the center part of the BFS which the lawsuit settlement calls the “temporarily restricted property” is now permanently protected as was promised when the eastern 36 acres were sold to Pitzer, Harvey Mudd, and Scripps, why not say so? If it isn’t, then why not? Please email TCCS (The Claremont Colleges Services, formerly known as the Claremont University Consortium) CEO Stig Lanesskog and ask.

stig_lanesskog@cuc.claremont.edu.

A Short History of the Land North of Foothill

Page numbers refer to "An Unfinished Dream" by Robert J. Bernard

1924: Miss Scripps authorized the purchase of 250 acres north of Foothill and donated it to the Colleges for educational use.

1925: Money donated for building the Memorial Infirmary (p 106). Completed 1931.

1926: The land given by Miss Scripps (except for 59.7 acres on the mesa and its slopes), a 3.85 acre Native Garden Preserve, and the site of Scripps College were designated as an endowment for Scripps College. Any of this land used for future institutions had to be purchased from the trust with the proceeds going to Scripps.

1935: 10 year lease to the City of 30 acres of land north of Foothill for a park (p 116).

1943: Sale of 10 acres east of the Infirmary road approved. Not completed. (p 229).

1945: Board voted to sell 76 acres north and west of Indian Hill Mesa to developers (p 242).

1948: Land on mesa leased for five years to Japanese gardeners for growing flowers.

1950: The colleges sold 30 acres to RSABG. In addition, they bought back (for three times the selling cost) 54 acres of the 76 previously sold and sold it to RSABG

1957: Faculty housing developed on 10 acres of land north of Foothill (p 118). Now privately owned.

1958: Ground broken for the School of Theology (p 544).

1959: Golf course established (p 116).

1964: Consortium agreed to College of the Immaculate Heart moving to the corner of Foothill and Mills. Project abandoned in 1970 (p 732).

1973: CUC considered building 18 hole golf course on future site of BFS.

1975: Board of Fellows recommended selling 20 acres of the remaining land for development (p 703) to reduce tax burden, despite Scripps Trust requirement it could only be sold for educational use.

1976: RSABG was granted the use of 10 acres for a Baja California annex (p 401). Never constructed. (Essentially the same site as proposed for KGI and which was sold to HMC in 2009.)
Donald McKenna arranged for the Kennametal Foundation to donate $600,000 to CUC to buy the BFS land from the Scripps Trust, fence it, and build the lake, plus $100,000 for an endowment. This was the Robert J. Bernard trust which allowed the land to become an official field station.

Over the next 20 years there were several plans to build on part of the BFS. All opposed by faculty and students and abandoned for one reason or another. College and community use of BFS continued to grow.

1996: Colleges began land planning process and approval of Keck Graduate Institute as 7th institution.

1997: Board of Fellows approved KGI at January meeting.
Policy Council voted to build KGI on BFS in March. Board of Fellows approved this as well.

1998: CUC submitted North Campus Master Plan to the City.

1999: Draft Environmental Impact Report (DEIR) submitted for public comment.
Architectural Commission approved EIR in spite of considerable opposition from citizens.
Friends appealed the approval to the City Council. Appeal was denied.
North Campus Master Plan began its consideration by the Architectural Commission.

2000 NCMP development agreement approved by AC and Council despite much opposition.
Friends of the Bernard Biological Field Station brought a lawsuit against the City maintaining the EIR was inadequate.
Coalition to Preserve Claremont's Character circulated referendum petition (during August) asking that development agreement be put on the ballot; gathered well over required number of signatures.

City asked CUC to negotiate with the Friends.
CUC barred use of BFS by all non-college groups.
Settlement terms for the lawsuit were agreed to by the Friends and CUC in November.
The City rescinded its approval of the NCMP also in November.
CUC then reneged on the settlement terms and negotiations resumed.

2001 Negotiations continued until February when a weakened settlement agreement was signed.
Major terms: A 45 acre center strip was to be preserved for 50 years (the TRP, or "Temporarily Restricted Property"), access to the BFS by public educational groups was to be re-instituted, more support, financial and otherwise, was promised, a new governance structure was to be implemented, no future building was to occur until the City approved a Master Plan for all CUC land (quarry, BFS, golf course).
June: CUC proposed demolishing Infirmary at BFS. City refused until Master Plan was approved.
July: CUC disbanded the Steering Committee, the faculty group which oversaw the BFS, and eliminated the position of Director. An Advisory Committee was formed with one member from each of the seven colleges, including one from KGI and a non-scientist from CGU. Its function was unclear, as was the governance structure.
September: CUC put up signs at the BFS saying "Claremont University Consortium. North Campus Property. Held in Trust for Future Expansion of the Claremont Colleges"

2002 Brenda Barham Hill confirmed CUC planned to build on all the land it owns including the BFS, golf course and quarry, and that a master plan was being prepared.

2004 CUC transferred ownership of the western 11.4 acres of the BFS to KGI, which leased the area back to CUC for continued use as part of the Field Station.
Procedures for community use of the BFS for educational purposes were finally drawn up.

2005 A new Advisory Committee was formed still without a clear function or powers.
CGU graduate housing approved for area north of School of Theology. This required widening North College Ave and resulted in the loss of 5-8 ft of the western edge of the BFS in the process.

2006 Signs went up on the fence around the KGI-owned site saying they owned it.

2007 CGU housing constructed

2008 CUC announced plans to buy KGI-owned part of the BFS and move physical plant, administration, dead storage for library books and parking there. Later decided this was not economically feasible
Consortium moving forward with plans to develop quarry for parking and playing fields although Master plan for CUC lands (quarry, golf course, field station) still not completed.

2009 Harvey Mudd College bought KGI-owned part of BFS to build parking lot. Posts were placed inside the BFS marking off HMC-owned part. HMC required by CUC to allow Claremont Graduate University to buy half.

2010 Changes to City parking ordinance eliminated need for a parking lot on the BFS, but HMC said land was bought with future expansion in mind.
EIR for building in quarry began; still no master plan for BFS, golf course and quarry
Clearer role for Advisory Committee determined
City approved splitting HMC part of BFS into four pieces; two sold to CGU
Pitzer announced plan to buy 14 acres of land around Infirmary with intent to renovate building and establish an institute for the built environment named for Robert Redford.

2011 City approved division of eastern portion of BFS into three 12-acre parcels
Colleges announced sale of these parcels to Pitzer, HMC, and Scripps.
Pitzer plans to renovate Infirmary and preserve natural state of most of its 12 acres.
If CGU, HMC, and Scripps build on parts they bought, BFS will be reduced by almost 40%

2012 Permanent BFS Director finally appointed

2013 In September, Golden State Water employees sparked a fire that burned 17 acres

2015 Newly proposed CGU master plan does not include building on their part of the BFS
In June, the sale of the eastern 36 acres to Pitzer, Scripps, and Harvey Mudd was completed.

2017 In May a fire of unknown origin burned 4 acres east of College Ave and south of the lake.

2018 Pitzer completed renovations to the infirmary and opened the Redford Conservancy in January.
CUC (now renamed The Claremont Colleges Services or "TCCS") still hasn't carried out 2011 promise to permanently protect TRP after sale of the east 36 acres.
Still no master plan for the former golf course or BFS; building in the quarry is going ahead even tho there is no master plan for all three areas as required by the lawsuit settlement.

More info and map at www.fbbfs.org For email newsletter: friends@fbbfs.org 5/23/2018

The BFS: Frequently asked questions

"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*

What is it? Where is it? Who owns it? Who uses it? Are there tours?

The Robert J. Bernard Biological Field Station (BFS) is approximately 85 acres of land bordering the Botanic Garden and is the open space north of Foothill between College Ave and Mills Ave. CGU owns 5 acres in the western part; Pitzer, Scripps, and Harvey Mudd each own 12 acres in the eastern part; TCCS (formerly CUC) owns the rest. The station is used as a natural laboratory for biology and other college classes, as well as for faculty and student research. Every year many Claremont schoolchildren visit the station. The BFS is not open for recreational use, but interested community groups can arrange tours (www.bfs.claremont.edu).

What is the habitat like?

Most is relatively undisturbed coastal sage scrub (CSS), a community fast disappearing in Southern California and considered threatened. Part of the eastern side was once a citrus grove but is now grassland. There is a small, manmade lake and vernal pool. There is sycamore-oak forest in the north and willows around the lake. The variety of habitats, which includes some disturbed areas, makes it especially useful educationally.

Are there any endangered species present?

Yes, there is Nevin's barberry. In addition, the CSS community itself is under severe threat with 80 to 90% already lost to development, and several animals that occur on the BFS are California Species of Special Concern. The Nature Conservancy has listed the Mediterranean biome, of which this is a part, as endangered.

How was the BFS established?

It is part of a large parcel donated in the 1920's by Ellen Browning Scripps for educational use. The land now houses colleges, the School of Theology, the Botanic Garden, the former golf course, and the Bernard Field Station. When sale of part of the land now used as the BFS was considered in the 1970's, Donald McKenna raised money to buy it from the Scripps Trust and donated the money. The land was fenced, the pond was dug and the station named after Robert J. Bernard who had helped to guide the Claremont Colleges Group Plan from the start.

Is the future of the BFS secure?

No. Important college decision-makers view the land as space for building. Only a referendum petition and lawsuit prevented the western portion from becoming the site for the Keck Graduate Institute in 1999.

Are there alternative sites for a field station?

There is no other sizeable, relatively undisturbed area within walking distance of the colleges. This close proximity means that many hundreds of students a year can do field work without having to spend time

and money on transportation. In addition, the fence makes it safe for students to visit on their own and to leave equipment set up for long-term experiments. A more distant site, if one could be found, would be used very little.

Is any of the BFS protected from development?
The central 35-40 acres (see map at www.fbbfs.org) were temporarily protected from building as part of the lawsuit settlement when the Friends opposed building the Keck Graduate Institute on the BFS. The remaining acres are now owned by various colleges. Only Pitzer so far plans to preserve any of its land.

Is the protected portion enough land?
The BFS is already quite small in biological terms and any loss of habitat would not only immediately destroy many thousands of plants and animals, but would increase the rate of subsequent extinctions. The smaller it is, the less useful for teaching and research. If the protected portion were the entire field station then, because of its very narrow, rectangular form, it would have a very long perimeter compared to the area. This means that no part of the habitat would be safe from serious "edge effects" caused by the neighboring properties. Noise, light, water, and pesticide pollution, along with increased invasion by non-native species, would make the ecosystems virtually impossible to maintain. It would also leave a very short Foothill frontage so that most of the view of the mountains over natural vegetation would be lost and the character of the street would be changed.

Do the colleges have to build on the field station?
No. Nowhere does it say that either the number of colleges or the size of colleges has to increase indefinitely. Miss Scripps donated the land for educational use and the BFS is definitely that. The Bernard Trust specifically states the land can be used for a field station and gives no time limit for this use.

Is the field station the only place development could take place?
No--although the consortium has sold the quarry east of Pitzer (now called the East Property) to Pitzer and CMC for sports fields and parking so it is no longer available, there is still the land that used to be the Claremont golf course. That area is part of the land given by Miss Scripps for educational use.

Do the colleges have an obligation to take into account the wishes of their donors? They do not always make decisions based on them. For example, the land recently used as a golf course, although part of the original Scripps donation just like the BFS, is still not in educational use. In the 1950's, the colleges sold part of the Scripps Trust to a developer (and then bought most back for the Botanic Garden). There are other examples.

Do the colleges have the right to propose building for the BFS land?
Certainly they do. They have the right to propose plans for any land they own.

What is the role of the City when developments are proposed?
California gives cities the police powers necessary to balance private property rights with public benefits and values. Cities set up zones which restrict development and also have the authority to make further restrictions within these zones. For example, the City of Claremont prevents fast-food restaurants in the commercial zone, and prevented the owner of the land that now houses Armstrong Garden Center from building a fitness center, clearly a commercial use but not one desired by the City. The City prevented the colleges from tearing down several Victorian houses on College Ave. The City devised the Hillside Plan to restrict development in residential areas of the foothills. Owners have a right to benefit from their properties, but not always in ways that they wish.

Is there general support at the colleges and in the community for building on the BFS?
No. Four of the five undergraduate faculties (one did not vote) voted overwhelmingly not to build there

when KGI was proposed. Students sent hundreds of letters, circulated petitions and held demonstrations. Members of both groups spoke before City commissions and the City Council in support of preservation. There was also very considerable opposition from Claremont residents which resulted in a lawsuit and a successful referendum petition. Later, there was considerable opposition to Harvey Mudd's plan for a parking lot on the BFS.

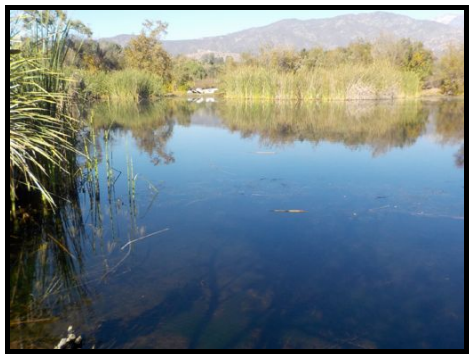
What is the current situation?

CGU now owns part of the west of the BFS, and Harvey Mudd, Scripps, and Pitzer own 36 acres of the east. Only Pitzer has plans to preserve any of the land. There was no way to prevent this sale from moving forward, and it's clear that each of these colleges intends to build on its part of the BFS at some point.

Why is the Bernard Field Station a poor site for development?

- ***It is an irreplaceable academic resource*** for the colleges, Claremont schoolchildren, and community groups.
- ***The most sustainable use of the land*** is its continued use as a stand-alone field station or as the campus of an environmental institute with a small footprint.
- ***It is aesthetically important*** to the character of Claremont because it preserves an unobstructed view of the mountains over natural vegetation along a major route through the city.
- ***It is culturally and historically important*** because it includes an area formerly inhabited by native Americans and preserves some of the ecosystem native to the Claremont area.
- ***It is ecologically important*** as an area of natural open space housing thousands of native plants and animals. The colleges would be doing their students and Claremont citizens a great favor by protecting all 85 acres.

Some Photos






L to R: scarlet delphinium, feather, unripe toyon berries, lake, coyote brush, ring of buckwheat petals around harvester ant mound, asters, golden currants, acorns

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