

News from the

Volume 21, No. 2, Dec 2020

Email to: friends@fbfbs.org

Website at: www.fbfbs.org



FRIENDS OF THE
BERNARD
BIOLOGICAL
FIELD STATION

Help Make the Ecological Walk a Reality!

In the [December, 2019 newsletter](#) we described our plan for a free ecological walk with native plant demonstration gardens along Foothill just outside of the BFS fence.

Creating this walk will require money to buy the plants, signs, and other supplies. The Garden Club has offered to donate \$2000 towards the demonstration gardens, but we still need quite a bit more to make this vision a reality. If you have any suggestions for funding opportunities we could pursue, or if you would like to contribute to the project, or sponsor a section, please let us know by **contacting Sue Schenk at sschenk9@gmail.com**.

Meet the Inhabitants

Yellow Rumped Warbler *Setophaga coronata*



This [bird](#) is common throughout the continent. Many migrate south to Mexico for the winter with others heading to the west coast. They normally spend a lot of time in conifers or mixed forests where they generally nest high up (it's likely these birds mainly treat the field station as a pitstop). In the winter they can be found in

Sightings

The pandemic has prevented visits, but here are some things we would have seen and heard



- ✓ Yellow tufts of scalebroom flowers attracting pollinators to the scraggly shrubs
- ✓ Bright red toyon berries heralding the holidays
- ✓ The rustle of dry grass as you walk through it
- ✓ The cooing and preening of gray mourning doves
- ✓ Rabbits scampering
- ✓ Scattered buckwheat hulls around the nest openings of dormant harvester ants
- ✓ The sharp tang of laural sumac leaves
- ✓ Dark green yerba santa contrasting with gray-green sagebrush
- ✓ Ever-present mustard species



open areas, parks, and in residential areas where there are fruiting shrubs and trees. Their diet is eclectic: they will peck out insects in trees, catch them on the fly, switch to berries when insects are scarce (including poison oak berries!), and even pick spiders out of their webs. In winter they may also visit garden feeders that provide seeds, peanut butter, or suet. Females build a cup-shaped nest in spring and lay up to six speckled eggs which hatch in about two weeks.

California Aster (*Corethrogyne filaginifolia*)



This local native annual plant can be seen throughout the BFS, starting with a small mound of thick, furry, gray leaves in late spring which grows into a 2x2 ft airy plant with fewer and smaller leaves strung along the stems. In the fall, small purple daisies appear, providing nectar for butterflies like the Acmon Blue at left (photo by Nancy Hamlett).

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.

Native Species at the BFS and at the Claremont Hills Wilderness Park

As part of the current update of Claremont's Sustainable City Plan, Nancy Hamlett scoured the records to produce a list of the native species found at the BFS and the CHWP. Detailed lists of the species will be posted somewhere, probably on the Friend's website at some point. Here are the overall numbers (still working on which birds are resident and which transient):

BFS (85 acres)

Mammals	22
Birds (total observed)	189
Reptiles	14
Amphibians	3
Vascular plants	178

CHWP (1693 acres)

Mammals	18
Birds (total observed)	151
Reptiles	11
Amphibians	5
Vascular plants	272

Fall Dispatch from the BFS *(Nancy Hamlett, BFS Volunteer Coordinator)*

This has been a most unusual fall at the BFS. Despite our hopes that the coronavirus situation would resolve by the end of spring, the pandemic has only worsened, and our area is especially hard hit. The Claremont Colleges are closed for in-person learning, and no volunteers or students are allowed at the BFS – only a few faculty and staff who are involved in monitoring or long-term research projects. So the BFS has been very quiet. In the absence of students, the trails are getting overgrown; the trail on the east side of the lake is almost invisible. Until now, one didn't realize how much just having the trails walked on helped to maintain them.



The fall was weird in other ways, too. On September 6, when the BFS weather station recorded 115°, the Bobcat Fire – one of the largest fires in LA County history – started in the Angeles National Forest in Azusa to the west of us. It continued to burn for more than two months, consuming almost 116,000 acres. The fire never threatened the BFS, but it could be easily seen and caused hazardous air quality (photo left).

But nature continued. As summer turned to fall, the California Asters, Valley Lessingia, Scale-

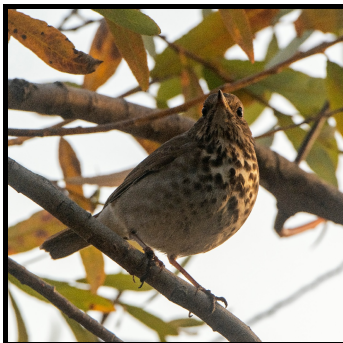
Broom, and Pine-Bush came into bloom, hosting the fall crop of butterflies.



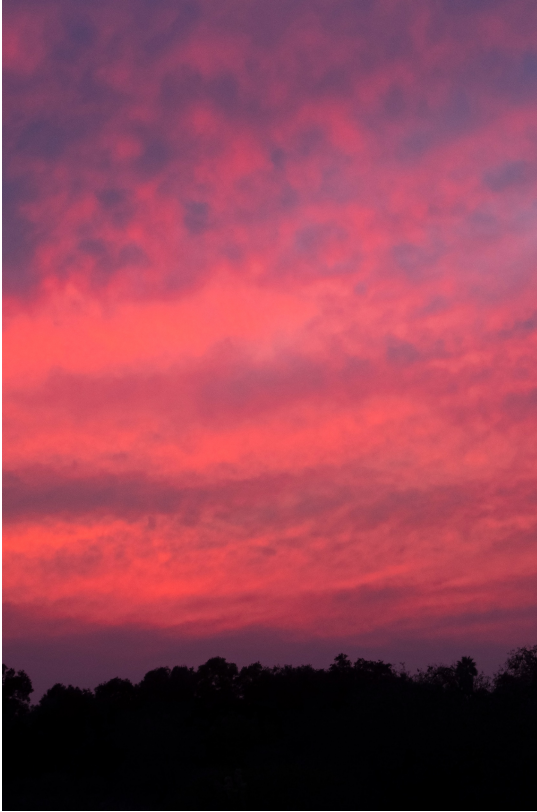
Above: Malacothrix with tiny carpenter bee
Left: fiery skipper, Acmon blue, banded garden spider
Below: hermit thrush, white-crowned sparrow, American coot

Migrating birds passed through, and winter bird residents settled in.

White-crowned Sparrows scurried around on the ground, Yellow-rumped Warblers flitted around in the trees, and Hermit Thrushes congregated in the Toyons. American Coots appeared on the lake, as well as a female Ruddy Duck, whom we hope gets some company.



Soon signs of spring will be appearing. It's not likely that students and volunteers will be back soon, but the field station will be waiting when they do.



Sunset over the coastal sage scrub; turkey vulture; red-tailed hawk; mating green darner dragonflies
Photos: scalebroom and California aster from Sue Schenk; all others courtesy of Nancy Hamlett

Excerpts from a Pomona College announcement

Developing a Faculty Network in a Biodiversity Hotspot: Research Experiences in Southern California for Undergraduate Ecologists Network

"...(Professor Nina) Karnovsky and Wallace "Marty" Meyer, director of the Bernard Field Station and an associate professor of biology, were awarded a \$71,011 National Science Foundation (NSF) grant to develop a network of professors at Southern California colleges to expand the research potential (primarily at primarily undergraduate institutions) throughout the region."

"At Pomona (and the other Claremont undergraduate colleges), students who study the region's flora and fauna have access to the nearby Bernard Field Station...yet the scope of undergraduate research is sometimes limited by time, place and other factors."

"...the only really big difference between professional research and the student research is that the student research happens over a really short period of time, like maybe a senior thesis or an independent study...And we thought, wouldn't it be wonderful for the students to be able to collaborate as we would collaborate as ecologists?"

For more information, see the relevant [Pomona College webpage](#)

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