Welcome to the start of a “new” year of volunteering at the Garden. Now that summer is almost over and fall is on its way, it’s time to think about the various ways we can use our time and talents to further the mission of CalBG.

First, I’d like to thank Lynn Miller for her leadership as president of the Volunteer Board for the past two years. She and other members of the Board got us back on track after the disruption caused by the Covid pandemic. We are planning to have more opportunities for volunteering in the Garden, and there will be some social gatherings where we can get to know one another better in a relaxed setting.

It’s exciting to know that “Bump in the Night” is coming back on Friday and Saturday, October 6 and 7. This popular Garden offering will require lots of volunteer help. Please watch for the opportunity to sign up on Volgistics.

To let you know a little about me as the incoming president, I live in Claremont and have been a visitor to the Garden since the mid-90’s. I became a volunteer in 2015 and was fortunate to serve on the Board as treasurer for the past two years. I’m looking forward to this new opportunity to spend more time at CalBG with all of you.

I’m so pleased to welcome our new Volunteer Coordinator, Patty España. We are lucky to have someone who not only has been a dedicated volunteer herself for many years, but also has a real love for the Garden. She brings new energy and ideas to this important position.

Once again, welcome!

---Betsy
Hello Volunteers!

I don't know that Oak Notes got enough of a rest... seems like just yesterday that I sent in my last column of the spring. It is still fresh in my mind and I must begin by correcting an omission. In that last column, I failed to recognize the heroic and monumental efforts of the Native Designs group in, first, creating the arrangements for the Forever California gala—several dozen of several different sizes/styles—all glorious! And of course they contributed not just one but two items to the live auction. The lucky winners of flowers through the seasons will be treated to arrangements monthly for the entire year following the gala. Absolutely unique and one-of-a-kind-only-at-CalBG auction item! I cannot thank the Native Designs group enough for all that they do! (Wreath decorating is coming right up!)

Next, as Oak Notes goes on vacay, I always wonder what the summer will bring. It has been a summer of two seasons this year. Almost of equal duration, we had extensive May Gray which extended into June Gloom before being followed by real summer. All of those marine layer days helped to ease the Garden into summer—I hope you all agree that we still look remarkably good (I have never seen the Oval buckeye nor the Courtyard buckeye with so many leaves so...
late in the summer). Of course, a lot of that is owed to our Horticulture team, but cool, cloudy, moist May and June certainly supported their efforts. With July came pretty normal summer weather and we’ve certainly had some heat though nothing terribly extreme (those of us who were here will always have the 118-degrees-on-July 6th summer of 2018 setting the very high bar for terribly extreme). Of course, we can get our hottest weather in late August and the first half or so of September so we won’t even remotely say goodbye to summer yet.

**Turning to new developments:**
I know you join me in saying **welcome** to Patty Nueva España as our new Volunteer Manager. If you have not stopped by to say hello to Patty, please do so. She is here mostly on Tuesday, Wednesday and Thursday. Patty will be working closely with Lauren Stoebel, Jennifer Scerra and other staff very closely; also, of course, with all of you! Thank you for your patience as we tried to feel for the right time—in the context of volunteer activity—to bring back a staff member. And **monumental** thanks to Julie Scheuermann for masterfully guiding the transition period and, now, providing support for Patty as she learns the ropes.

Writing about Patty as the new Volunteer Manager reminds me to say that I hope a lot of you were able to interact with Ady Bolinger while she was working with us over the summer. Those of you who have been active at the Garden for a while remember her mom, former Volunteer Manager Brenda Bolinger, with great fondness. It was great fun to have Ady with us and she may be back for more.

Also in the staff arena, we **welcome** Sally Hy as Community Education assistant. Sally is working closely with Jennifer Scerra and will also be working closely with a lot of you as school tours and other activities gear up again. If you have not met Sally, stop in and say hello: she is across from Jennifer and is in most afternoons.

In October, we will also welcome back “Things that Go Bump in the Night” this year after a three year, covid-related hiatus. In the lead is Jennifer and she is designing an event with both some of the good old stuff as well as some new stations/content. By all means, share your ideas with her! Prepare to volunteer for this very fun event!

Also prepare to volunteer for the launch of the Grow Native Nursery sales season in mid-October. While not quite the all hands on deck event that it used to be, we will still need the able help of a goodly number of volunteers. Mariana Rodriguez did a magnificent job with the GNN last year and we are looking forward to another terrific year! **Special** thanks to volunteers Steve Bryant and Tom White for extreme generosity with their time—they both provided nearly full time support for the GNN last year—VERY much appreciated by all of us!

Finally (for now), we are excited to welcome three new graduate students to our program. Charles Boissavy joins the Ph.D. program, while Garrett Goodrich and Matthew Yamamoto will be

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**A Very Happy September Birthday to:**

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embarking on master’s degrees. Those of you who volunteer in the herbarium may remember Garrett Goodrich who was with us for several months during the peak of covid. If memory serves, his home campus (Vassar College) had gone remote at that time. Garrett was a terrific member of the herbarium team and also participated widely in Garden events. We are confident that all three of these new students will be great additions to our graduate student body. No doubt each of them will, in turn, be supported by the assistantship in Community Education, in which capacity they will work closely with all of you and you will get to know them well!

Onward into fall! But first, thanks to all of you who have been with us in various capacities over the summer—inclusive of Wednesday and Saturday workgroups on the grounds, the nursery team, the herbarium team, etc. Wherever you volunteer, you strengthen the Garden and support all that we do!

Hope to see all of you soon!

Meet Sally Hy, Community Education Coordinator

Hello, Volunteers!

I am so delighted to join the Garden as the new Community Education Coordinator. Each day at the Garden looks different to me. One day, you’ll catch me cataloging our taxidermy collection, counting inventory from past events, wiping coke off the outdoor classroom’s fridge, and shadowing tours of our Garden. While on another day, you might find me in the office researching stickers, digging through old program documents, scheduling group visits, and proofreading prints. In essence, I will be assisting our Visitor Engagement team with our community education events and programs—especially school programs (so you’ll probably be seeing a lot more of me, Garden Guides)!

As for my background, I studied at CSU Long Beach where I earned a Bachelor of Arts in History, and then continued my education at CSU Fullerton, earning a Master of Arts in Public History. Throughout my academic journey, I knew I wanted to be a part of building connections between the public and cultural institutions, and that’s kind of how I stumbled upon this position during my search. I am happy to be a part of a team that not only educates the public on our beautiful native California plants, but also incorporates information into fun, engaging, and innovative ways that resonate with the public.

It has been wonderful meeting everyone thus far, and I look forward to continuing to meet each of you as I get settled into this new role!

Meet Katina Vlastos, Treasurer

Katina Vlastos is married to her husband, Bob Witt, of 45 years, has three grown children, and is a grandmother of two sweet granddaughters. Katina retired in 2018 after 34 years as a teacher at Etiwanda High School. She primarily taught math, served as Math Department chair, and in earlier years, taught peer counseling and was part of an interdisciplinary team teaching reading and comprehension skills. She was a team leader in developing and implementing curricula to meet Common Core standards in Mathematics and senior-level courses in preparation for college math. Since retiring she has enjoyed volunteering with the Inland Valley Down Syndrome Association, the Rancho Cucamonga Public Library, CLASP, and the Friends of the Los Angeles River. She has a long history with the California Botanic Garden, as a Pitzer College student visitor, and later enrolling her two sons in the Garden’s after-school education programs. Her infant daughter’s first outing was at the Garden. Throughout the years, she has supported and valued the Garden and began volunteering in 2019. Katina is honored to be treasurer of the Volunteer Organization and looks forward to being of service to the Garden.
Hello Volunteers! My name is Patty Nueva España, I am the new Volunteer Program Coordinator. Some of you may have seen me around the Garden from time to time as a volunteer. I have been so grateful to get the experience working with the remarkable Saturday Grounds Crew since I joined about five years ago. Most recently I was able to add the Wednesday Grounds Crew to my volunteer assignments. This allowed me to work alongside the incredible, dedicated Horticulture staff and learn so much about our beautiful native plants. I also had the distinct pleasure of spending a brief bit of time mounting specimens in the Herbarium Workroom with some other volunteers and staff. And, in the last few weeks I had a chance to hang out in the Propagation greenhouses, giving me a well-rounded view of CalBG and some of its parts.

I also enjoy serving as an officer on the Board of Directors for the Pomona Valley Audubon Society. This is an organization that partners with CalBG to provide guides for the Sunday morning Bird Walks, and joins forces for the Family Bird Fest and Things that go Bump in the Night events. I have had the humble pleasure of holding and presenting birds to the crowds at both events in the past.

The Garden became an important part of my life when I was compelled to become a member over 20 years ago so I could shop the Fall Plant Sale early with the other members. I have greatly enjoyed so much of what CalBG has to offer. At my home I am surrounded by the native plants that I have learned to love, along with the birds and animals they naturally attract.

I am so thrilled to be a part of the Garden staff and to get to know all of the wonderful volunteers here.

Please feel free to reach out and say hello, I would love to hear your thoughts. You can reach me at pespana@calbg.org or 909-625-8767 ext. #256.

Each year, the Native Designs volunteers hold a workshop to decorate the grapevine wreaths made from vines harvested on St. Patrick’s Day. The decorated wreaths are sold at the Fall Plant Sale with the proceeds going to the Volunteer Treasury.

This year’s workshop is September 10th through the 16th in the Lenz Classroom in the Hort Building. You are invited to participate! We are looking for creative volunteers (and their talented friends) to enhance the wreaths with either items from the Native Designs inventory or with décor you bring yourself.

The workshop is low-key and friendly. It is a great opportunity to introduce new people to the Garden in a casual, creative atmosphere. There will be veteran volunteers on hand to help with the mechanics of wreath-making, so don’t worry if you don’t have experience. We will have glue-guns and wire aplenty!
There are morning and afternoon shifts each day, and times will be posted on Volgistics. We can accommodate six designers per shift. We hope you will come and share in the fun. If you have questions, drop an e-mail to NativeDesigns@CalBG.org.

**Things that Go Bump in the Night!**

*by Sally Hy, Community Education Coordinator*

Grab your flashlights and get ready for one of our most popular and beloved events to make its grand return. It is, “Things that Go Bump in the Night!” Please mark your calendars for October 6th and 7th, and join us for this two-night event from 5:30 p.m. to 9:00 p.m. to take part in a “nightlife” like no other.

There will be live (and not live) animals, intimidating plants, (spooky?) performances, and food trucks with no shortage of games, crafts, and activities to lend a helping hand in. We welcome back our seasoned Bump in the Night presenters, including Pomona Valley Audubon Society and Wild Wings, as well as new presenters, such as the SoCal Bat Working Group and the Alf Museum. We will also be bringing back Guided Night Hikes, with a new addition of Guided Oak Forest Hikes, to explore the wonders of the Garden’s past as an oak woodland.

Please join us in creating an eventful and memorable evening, and ensure the night doesn’t go without a bump!

**Oaks of Southern California**

*by Steve Bryant*

*Oak Notes* should have notes on oaks, I guess, of which there are currently 12 spp. in SoCal. Two have thin-lobed, deciduous leaves (i.e., a *roble*, in Spanish). Hence, Paso Robles, or Pass of the Oaks (Should it now be called Paso de Viñas?). The rest of the oaks are evergreen, or *encinos* in Spanish, hence Encino, CA. If you see a *roble* in the San Bernardino or San
Jacinto mountains, it is almost certainly a California (Kellogg) Black Oak, *Quercus kelloggii* (pictured opposite). It has acorns only about twice as long as the cup is deep, and grows from low elevations in NorCal to ~2600 m in the mountains of SoCal. The large acorns were a favorite of California’s indigenous peoples. The other *roble*, *Q. lobata* (Valley Oak), gets into the San Gabriel Mountains, but is most common in the hills surrounding the Central Valley. It has more elongate acorns (3–4 times as long as the cup is deep).

Growing up in the 1950s, I thought scrub oaks were easy—there were only two in SoCal (scrub oak then being a general term for encinos are usually <7 m tall and generally multi-trunked). These two were *Q. dumosa* (then just called “Scrub Oak”) and *Q. durata* (Leather Oak in SoCal, found only on the coastal slopes of the San Gabriel Mtns.). Now *Q. dumosa* has been split into five spp., and, with the possible exception of *Q. turbinella* (Desert Scrub Oak), they hybridize. Many also have overlapping characters and distributions, so Good Luck! *Q. berberidifolia* (pictured above) (now just called “Scrub Oak”) seems to be the most common scrub oak in our region.

*Quercus agrifolia* (Coast Live Oak) is our common large (i.e., majestic) oak in cismontane lowlands, growing especially in canyons, with strongly cupped leaves that usually tear when flattened, an elongate acorn, and notable mast fruiting. Canyon Live Oak (*Q. chrysolepis*) (pictured above) is common in mountain canyons; it has golden pubescence on the undersides of young leaves and on acorn cups, and large short fat acorns: your thumb will probably fit in a mature acorn cup. Interior Live Oak (*Q. wizlizeni*) is usually montane in SoCal. It has more elongated, smaller acorns, no golden pubescence on the undersides of leaves, and an acorn cup 12–18 mm wide (too small for most thumbs).

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**Book of the Month**

Gene Baumann, Voluntary Library Committee

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The Forgotten Botanist: Sara Plummer Lemmon’s Life of Science and Art

by Wynne Brown.

University of Nebraska Press. 2023. 308 pp.
We know Sara Plummer Lemon primarily as a tireless activist who secured the California Poppy (*Eschscholzia californica*) as California’s State Flower, via state legislature approval, in 1903. However, as with many early female scientists, her accomplishments are substantially underappreciated. Even after numerous accomplishments in the field of botany her work was often credited as “J. G. Lemmon and wife”.

Wynne Brown does an admirable job telling this important biography. From her early years as a bright, curious but sickly young woman on the East Coast, to her courageous exploration of the Western Slope, Sara Plummer Lemon is shown to be a remarkable explorer, self-taught botanist, activist, and scientist. She founded the first library in Santa Barbara, was the first female invited to speak at the California Academy of Sciences, and along with her husband found numerous new plant species. She was also a journalist, significant activist in women’s suffrage, gifted artist, and fought for forest conservation. Her efforts in the area of botany and conservation were aided by her ability to befriend and gain the respect of notable people including: Asa Gray, John Muir, Charles Parry, Henry Bolander, Alice Eastwood, Kate Brandegee, and many more.

Wynne Brown’s book is an important addition to the history of botany in California. It is also inspiring and gratifying to find that this forgotten botanist is acknowledged as having made significant contributions to botany and several other fields.

This book is available to volunteers for check out in the Volunteer Library.

**Wearable Sensors**

**by Fred Brooks**

Do you own a smartwatch or know someone who does? Smartwatches contain sensors that can measure steps walked and distance traveled, chart your position, heart rate, blood pressure, and more. We have lived with sensors most of our lives: thermostats, CO₂ and smoke detectors, and electrocardiograms. They sense change, transmit it to a **machine learning file** that interprets it, and then changes the temperature, sounds an ear-splitting alarm, or creates a summary of heart activity.

This wearable sensor technology is now being applied to plants. Recently, researchers at North Carolina State University (NCSU) designed small wire sensors and attached them to the undersides of tomato leaves. This stomate-rich environment allowed them to detect volatile organic compounds (VOCs) produced by the plant, along with leaf-surface temperature and humidity. The information was then translated by an algorithm in the machine learning file, indicating plant stress caused by physical injury.

VOCs, driven by selection pressure, may be a plant response to immobility. Plants cannot run from parasites, so most synthesize and release chemicals that repel parasitic insects like aphids and caterpillars, or attract predators to feed on these parasites. Many plants also depend on beneficial organisms for pollination and/or seed dispersal. The corpse plant (*Amorphophallus titanium*) was in the news recently. It produces VOCs that smell like rotting flesh and attract the beetles and flies that pollinate it. The VOCs of some plants promote seed dispersal by emitting the scent of their ripening fruit.

Plant diseases can have a serious impact on crop production. In further testing, the NCSU researchers inoculated a “wired” tomato plant with tomato spotted wilt virus. Four days later, changes detected by the leaf sensors indicated that the plant was infected. In agriculture or in home use, this technology could monitor plant responses to disease, or an excess or deficit of water, light, soil pollutants, or other plant stressors. Notably, this is done in real-time—no waiting for information that may arrive too late to save the plant.
SUNSET SOCIAL
Photos by Marla White.
The volunteer luncheon took place on Friday, June 9th 11:30 a.m., in the Outdoor Classroom. At the request of the volunteers, the format was potluck. As usual there was a wonderful selection of foods and dessert from which to choose.