From the President
Betsy MacLaren, Volunteer President

While on a recent walk in the Garden, I reflected on how the colors of the rainbow are on display there for us to enjoy. From the green of the leaves and succulents to the vibrant and subtle shades of the flowers, the colors are a feast for our eyes as well as for the various insects that are drawn to them.

Speaking of insects, we are fortunate to have a bee expert as one of our volunteers. Hartmut Wisch is going to be our speaker at the next Enrichment presentation on bees on June 12 at noon in the Lenz classroom. I am looking forward to his talk and the photos he has taken over the years. It’s important to know more about these valuable insects who are threatened with extinction due to climate change, habitat loss, pesticides, disease, and other conditions. We will be better protectors of bees if we have a broader knowledge of them. I hope you will join us on June 12.

The Enrichment talks (and field trips) used to be a regular offering to the Volunteers, but the pandemic put them on hiatus. We are pleased to have reestablished the Enrichment/Field trips committee. Since December at CalBG, we have had presentations on horticulture monarchs and milkweeds, the geology of the Garden and Eastern San Gabriel Mountains, fieldwork in Nevada, and the cataloging and digitizing of the extensive artifacts collection of Sherwin Carlquist. After the June presentation on bees, we will take the summer off but will start up again in September. The committee is also planning two field trips this next year, one in the fall and one in the spring. We hope to see you at one (or more!) of the presentations, and we’d love to have you join us one of our field trips.

—Betsy
Greetings volunteers and happy almost summer! What the seasons will bring here at CalBG keeps me constantly on pins and needles. Will it be a scorcher or a relatively gentle summer? A summer of normal dry, low humidity or one with a lot of monsoonal influences from the east/southeast? Another hurricane anyone? Time will tell and we just have to wait. NO complaints about the weather this spring season though—‘glorious’ has often come to mind.

Before I get to Part 2 of my short series on graduate education at CalBG, I want to thank everyone who helped in any way with the gala—Forever California. The Native Designs arrangements were over the top glorious! Truly they make the event. Many of you helped out on the grounds with the ‘detailing’ of the venues in advance of the event. I saw those bushels—hay stacks worth—of weeds that were pulled out of the area around the Courtyard! The venues were indeed glorious! Many of you helped out on the day of: there is a LOT to do to stand up an event like that! And then quite a few of you came and joined the fun (pretty sure I even saw one volunteer couple dancing!). THANK YOU!

Thanks too for all that you will do to help in the coming weeks and months. By the time you get this, Waterwise will be in the rearview but a LOT of you will have helped with it. And then there will be the summer events—members only and open to the

A Very Happy Birthday to:

**June Birthdays:**
Bill Bourbois
Wanda Ewing
Charlyn Fijan
Terry Givens
Paulina Guerrero Torres
Lisa Hahn
Sherry Hogue
Karye Hood
Esther Jin
Judy Moffet
Barbara Nakaoka
Jack Rosenbrock
Catherine Rowlee
Edwin Sell
Marion Swick

Bill Waggener
Laura Wilkerson
Carlie Wong
Shivani Yardi

**July Birthdays:**
Jennifer Aparicio
Emilie Ballard
Eugene Baumann
Jean Beckner
Andrea Bennett
John Biddle
Chris Caenepeel
Emma Clark
Ann D’Antonio
Jean Denton
Albert T. Finnerty
Barbara Gentry
Tera Johnson
Vivian Li
Ann Moreau
Kathleen Noll
Mary Perera
Kyra Saegusa
Marla White

**August Birthdays:**
Steven Bryant
Mary Chamberlain
Lorraine Francis
Shaunna Gygli
Dorita Hamer
Sophie Hamilton
Elene Kallimanis
Lyra May
Linda Munsey
Ray Owens
Carol Petty
Sara Simon
Susan Starr
Jorene Taylor Swift
Kelly Swift
Linda Troyer
Rudi Volti
Cindy Walkenbach
Rachael Wilkerson
Susan Winderman
Joanna Wren
Stephen Zetterberg
Christine Zukowski
public. We will need your help and we welcome your participation in any and all ways.

Back to grad ed at CalBG. At the end of the first article (readily accessible on the website if you did not already catch it), we were talking about how we fund grad ed here. I had told you that CalBG funds the graduate program by providing tuition waivers, stipends, instruction and mentorship, and resources (including molecular lab, Scanning Electron Microscope, herbarium, library, office space for each student). I suspected that would raise some questions in your minds and so will structure this as responses to anticipated questions.

**Why doesn’t Claremont Graduate University (CGU) fund the Botany program?** CGU is itself largely tuition-funded; its endowment is solid but too small to fund the university to any significant degree. Botany is the only science (unless one counts math). We are a topical outlier as well as a physical outlier and, although CGU is happy enough to host Botany, if they had extra dollars, it is unlikely that Botany would be top priority. We operate financially external to CGU.

**How does CalBG fund graduate education?** At present, we have ~$1.65M in endowed funds for grad ed, a number that has grown dramatically in the last 10 years or so (it was about $200k when I arrived in 2006). The short-term goal is $2M, which would fund four students @ ~$25k p.a. The medium-term goal is $3M to fund six students. Notably, among the $1.65M is an endowed fund of ~$520K, the LaFetra Fund, that supports graduate students to work with our Community Education program (a win-win for both programs). We also have two commemorative funds, the Jean Platt and Goldhamer Family Funds that currently total nearly a quarter $M each and are being actively built by family members. In the case of the Platt Fund, Jean’s daughter, Trustee Ann Walker and her sister, contribute regularly to this fund which was begun by their late mother.

We also now have considerable externally funded projects that support students. The following programs (# student-semesters per annum) fund students: conservation genetics (2–4), research grants (1–2), conservation/restoration (1), herbarium (1–2), Alumni Fund for Grad Ed (1–2). The last fund stems from letters that I write twice a year; these are directed toward alumni, filled with news relevant to the grad program, and raise money for the Alumni Fund. Core Garden funds support the rest, including students who serve as teaching assistants in our core graduate courses.

**What DO we get from CGU?** The big items are: accreditation (we are far too small to be accredited as only CalBG); access to the pooled library resources of the entire consortium; access to classes across the seven colleges (~1 in 3 of our students takes a class ‘off campus’; 5Cs undergrads may also enroll in our classes—I have had an excellent Pomona student in my class this spring semester); some degree of student services (e.g., CGU helps when we admit an international student; there is a financial aid office which the occasional student uses; student health inclusive of mental health); backup functions (e.g., we can use classrooms there when needed as when our internet failed entirely last fall). For these services, we pay CGU an estimate of the marginal cost per student for the university to provide the relevant services. The actual dollar sum paid to CGU is between $20k and $30k annually, depending upon our enrollment and the larger CGU enrollment.

Our students do a splendid job of securing external grants to support the costs of their research. These costs are not trivial: consider a student working on a floristics project in northern Inyo County with hundreds of miles to travel multiple times each summer. Molecular work is also expensive (reagents, DNA sequencing). Students winning external grants for the direct costs of their research enable us to use our endowed funds for other forms of student support.

Lastly, I want to let you know that when Oak Notes comes back from its summer vacation, we will be ready to introduce you to four new grad students.

**Thank You**

The Oak Notes editors thank our contributors, readers, and publisher Carole Aldrich, for another year of dedication to our volunteer effort at CalBG. Have a safe summer and we’ll be back in September 2024.
We admitted our top four—of a quite large pool of many excellent applicants—and all four have signaled their intention to join us. Two masters and two Ph.D. students will add to our continuing group of three Ph.D. and five master's students. Two of the master’s students will complete their degrees in the next month or three or so: Peri Lee Pipkin and Kim Schaeffer. When you see the announcements for their final presentations, please know that you are very welcome to attend and that these talks tend to be quite accessible and full of fascinating plant diversity. Please attend if you can!

See you in person on the trails and in the halls at CalBG and on the pages of *Oak Notes* come September!

**Volunteer Happenings**

**Patty Nueva España, Volunteer Program Coordinator**

We are coming close to the end of another season at CalBG, giving us an occasion to celebrate with a final Volunteer Quarterly Luncheon and Meeting. The luncheon will take place on Friday June 7th at 11:30 a.m. Of all the opportunities that volunteers have to get together and socialize throughout the year, this one is the most special. One of our long-serving volunteers, Jean Rosewall, will be recognized with a special Volunteer Emeritus distinction. We will also get the chance to honor our volunteers who have achieved 5-year milestones in their volunteer service.

**The following volunteers will be recognized for their continued years of service:**

- 45 Years: John Biddle
- 25 Years: Jack Rosenbrock, Carol Hopping, Judy Moffet
- 20 Years: Donna Bedell, Virginia Herd, Laura Burt, Shaunna Gygli, Bill Waggener, Lee Waggener
- 15 Years: Herbert Boss, Laura Burt, Shaunna Gygli, Bill Waggener, Lee Waggener
- 10 Years: Linda Munsey, Dean Shimek, Betsy Zimmerman
- 5 Years: Alec Bryson, Judy Bryson, Sofia Flores, Lorraine Francis, Martin Francis, Mark Kay, Ann Le Vangie, Jeremiah Sailor, Barbara Shelley, Susan Starr, Katina Vlastos, Christine Zukowski

Volunteers who have performed exemplary time and service to the Garden throughout the year may also be highlighted and given a chance to shine. Whether you going to be recognized for service this year or not, please come to the luncheon and cheer on your friends! This is a luncheon not to be missed.

**Upcoming Event:** On the weekend of June 22–23, CalBG will be showcasing and introducing the new “Bird and Butterfly Garden” with special activities. This will be a weekend-long event brimming over with tours of the B&B Garden, new display signage, classes, activities, an art installation, and music to entertain. One of the best ways to enjoy this multifaceted event is to be a part of it. There will be some fun ways to volunteer and we will soon be sending a notice to sign up for your chance. See you there!

**Horticulture and Research Committee by Tom White**

My name is Tom White and I chair the horticulture and research committee. There are several areas in horticulture and research that accept volunteers. Volunteer grounds work is directed by Grounds Manager Jared Nokturne and his team of eight horticulturalists. On weekly Wednesday workdays, from 8:00–11:00 a.m., volunteers work side by side with the horticulturalists on weeding, pruning, and planting. On Saturday workdays, on the first and third Saturdays of the month from 8:00–11:00 a.m., volunteer Richard Davis oversees the volunteer effort on tasks specified by the horticulture staff. In addition to Wednesday and Saturday workdays, there are also frequent opportunities to set up individual work programs with the horticulture staff.

The Production Nursery has recently had many volunteer opportunities. Volunteers assist with plant propagation and transplanting under the direction of Hugo Sopéña and Jazmeen Bell. These plants ultimately end up in the Garden’s living collection or for sale in the Grow Native Nursery. The GNN is headed by Mariana Rodriguez. There are many volunteer opportunities at the GNN during the fall plant sale, and during the season there are sometimes opportunities for other tasks, such as labeling new plants.
In the Herbarium, under its director Mare Nazaire, volunteers help prepare and mount specimens. Library and Archives, under the direction of Ken Otto and Vanessa Ashworth, also has an occasional volunteer opportunity.

If you are interested in volunteering in any of these areas, please contact Patty Nueva España at pespana@calbg.org.

Volunteer Education Committee by Virginia Herd

The Volunteer Education Committee meets once a month at noon on the third Thursday in the volunteer library. Anyone who’s interested in guiding tours of the Garden is welcome to come. We have school tours that align with grade level science curriculum, special tours such as wild flower tours and other adult tours, and tours for youth groups.

Our Garden by Judy Moffet

Spring brings a profusion of flowers
Helped immeasurably by showers.
Our eyes are dazzled,
Our nerves less frazzled.
This joy and delight empowers.

Come Enjoy Nature’s Splendor

June Annual Volunteer Luncheon
Friday June 7, 2024 at noon
Lantz Outdoor Classroom

Please bring an appetizer, salad, or dessert to share. Main dish provided by The Grill House, LaVerne. Drink and utensils provided. Tram starts at 11:30 am. Don’t forget your name badges.

A Selection of the Most Drought-resistant Plants by Steve Bryant

I started to write about Washingtonia filifera, our native palm, but the Wikipedia article covers everything I was going to say, except that local governments usually require the dead fronds be removed due to fire hazard, thus destroying the natural look of the tree. So, since the hot dry season is approaching, I’ll write about native plants that need no supplemental water once established (two years or doubled in size after planting). Any
of the listed plants may need supplemental water for establishment, even during the cool season, in a low rainfall year. Local sages (including *Trichostemma*, *Artemesia*, *Penstemon*, and others in the “no-supplemental-water-needed category,” may go drought-dormant and not look good without some dry-season water. Larger plants that usually look good year-round without supplemental water include: *Adenostoma* (both, below left and right), *Arctostaphylos glandulosa* and *A. glauca*, *Ceanothus crassifolius*. *Dendromecon rigida* (*D. harfordii* may need some summer water to look good, depending on your garden), *Ehrendorferia chrysanthi*, *Fallugia paradoxa* (above left), *Fremontodendron*, *Hesperoyucca*, *Heteromeles*, *Justicia*, *Larrea*, *Olneya*, *Parkinsonia*, *Prosopis glandulosa* *, Prunus ilicifolia*, *Purshia* (middle left), *Rhus ovata* and *R. integrifolia*, *Sambucus*, and *Prunus ilicifolia*. Also, any of the scrub oaks and, if you have a north-facing slope or dry canyon, *Quercus agrifolia*. Plant *Trichostemma* and *Fremontodendron* in the fall, as they need to reasonably establish before the dry season: they may die if watered in summer. Medium-sized plants include *Bebbia juncea*, *Eriogonum fasciculatum*, *Romneya*, and *Senna covesii*. Many small plants survive by senescence of their aboveground growth during the late dry-season, something to consider when planting. Nonetheless, a selection of these includes: *Allium fimbriatum*, *Dipterostemon*, *Bloomeria*, *Muilla*, *Calochortus*, *Chlorogallum*, *Paenoia*, *Delphinium cardinale*, *Lupinus latifolius*, and *Asclepias*.

*Gads (goodness gracious) = another name change.
I was just checking with Jepson, and the mesquites...
have been reclassified: *Prosopis* was found to be polyphyletic (Hughes, et al. 2022. “Disintegration of the genus *Prosopis* L.” (Leguminosae, Caesalpinioideae, mimosoid clade). *PhytoKeys*. 205. 10.3897/phytokeys.205.75379.). *Prosopis glandulosa* (Honey Mesquite) is now *Neltuma odorata*, while the Screwbean Mesquite, formerly *Prosopis pubescens*, is now *Strombocarpa pubescens*.

**Book of the Month**

**Amy Baumann, Volunteer Library Committee**

As we head into the summer months it is a good time to revisit Olson’s guide to gardens in our golden state. The book is divided by area featuring the best gardens in Northern and Southern California. The introduction to the book includes an interesting brief history of California gardens and how they developed. Olson states that California has some of the greatest gardens you will ever see, anywhere. The guide introduced me to the Japanese Friendship Garden in San Diego’s Balboa Park. The San Diego Park includes nineteen gardens and has become one of my favorite places to visit. Olson also includes the Hortense Miller Garden in Laguna Beach. This 2.5-acre garden features a wide variety of beautiful plants including many California natives. A tour of a mid-century modern house designed by Knowlton Fernald, Jr., is a part of the experience. A visit to this garden is by reservation only. I found the advanced planning to be well worth the effort as I thoroughly enjoyed exploring this unique setting.

**Enrichment Presentation on Bees**

**by Betsy MacLaren**

We are fortunate to have Hartmut Wisch, a volunteer at the Garden and an expert on bees, as speaker at the Enrichment presentation on Wednesday, June 12, at noon in the Lenz Classroom. Hartmut is a retired naturalist-guide. For 35 years he led European visitors through natural areas of the United States and the Canadian West, and while doing so discovered a love for macro photography. His principal interest is insects, primarily our native bees foraging in flowers.

Hartmut took several bee identification classes with Robbin Thorp, is a member of the Lorquin Entomological Society, and a contributing editor of bugguide.net (hosted by Iowa State University, Department of Entomology). He has contributed photos to numerous books and journals, given talks on native bees, and is a volunteer docent at ECNA as well as a past docent naturalist at our Garden.

In his PowerPoint presentation, Hartmut will give us a brief evolutionary background of bees, including how we define them, and what makes bees potentially the best pollinators. In addition, he will discuss the six families of bees present in North America with emphasis on species known to visit CalBG.

Please plan to join us for a fascinating hour on the subject of bees!
Hartmut Wisch discovered a love for macro photography and a fascination with the diversity of insect fauna. He has worked as a naturalist at Eaton Canyon Nature Center in Pasadena and Theodore Payne Foundation in Sun Valley. His special interest is in observing and identifying native bees, pollen wasps (*Masarinae*) and their relationship to their pollen plants. He will share information on the evolutionary history of pollinator bees and emphasize pollinators that can be found at the California Botanic Garden.

He is a contributing editor at [https://bugguide.net](https://bugguide.net) (Iowa State U. Entomology). hartmutwisch@gmail.com.

CalBG Gala 2024
by Jessica Wetzel, photos by Carrie Rosema

CalBG’s annual fundraising Gala, Forever California, sparkled throughout the Garden on the evening of May 5th. Thanks to the generosity of our sponsors and donors, this event raised over $260,000 in funding that advances the mission of the Garden and allows us to maintain—and improve our facilities. The Advancement Department extends our gratitude to the volunteer organization and the whole CalBG staff. This event is a herculean task that requires the whole CalBG community to pull off. From the beautiful Native Designs centerpieces, to set up, to helping at the live auction, volunteers made this event a success. A personal note: with just over four months under my belt at CalBG, I am inspired and humbled by the “all hands on deck” nature of this organization. It is truly a wonderful thing to be part of.

Above right: Jennifer and Lucinda
Middle right: The Secret Jazz Band
Below: Guests looking over the auction items.
Forever California

Photos by Carrie Rosema

Top right: Guests enjoying the silent auction
Middle right: A beautiful tablescape featuring Native Designs Centerpieces
Bottom right: Executive Director Lucinda McDade opening the live auction
Top left: Naomi and Carrie
Middle left: Shauna and Paula
Bottom left: Ingrid and Julie