Hello everyone,

If it’s true that our recent rains added up to nine inches, this is something to celebrate. I am grateful for what we now have, but I wouldn’t mind more. Today I noticed flower buds on the Ceanothus in my backyard, so I can only imagine what is getting ready to bloom in the Garden. When you do visit the Garden, be sure to visit the inventive and evolving sculpture show, *(Re)place*. The rain brought some designed changes in the unfired and seeded creations, so the next question is, what will grow in their place?

Thank you to all volunteers who helped with Luminaria Nights. You set up and took down, lit candles and lights, checked guests in, tended bar, and guided people on their way. All four evenings were successful, and our guests enjoyed a beautiful night out. Thank you Susan Starr and Marla White for organizing our Cider and Cookie sales. We also sold merchandise, so thank you to our craftswomen: ceramist, Katy Douglass and Zen rock designer, Wanda Ewing. Barbara Nakaoka donated the Matilija Poppy quilt for our Opportunity drawing, and Native Designs provided wreaths. Our visitors were able to shop while they enjoyed their warm cider and cookies. Receipts are still coming in, but we raised a significant amount of money towards our year-end donation to the Garden. All great news and thanks for your support!

It’s hard to believe that a two months ago we freely enjoyed Luminaria Nights, and now Omicron has limited volunteer activity. If you have questions, check with your staff leader. Currently, it’s difficult to plan our favorite events, but the Staff is looking for monthly themes to keep our visitors and members engaged. Wisely, the annual Grapevine Harvest has been moved to March 17th, giving the vines more time to soak up a good drink. Covid is a challenge, but it is no match for the creative thinking of our Garden Staff and Volunteers!

Once again, patience is a key word in our lives. In the meantime, I wish you good health, and when you feel the need, the Garden is just the place for a break.

Be well,
Hello faithful volunteers!

I feel like we are pushing restart yet again and I am tired of it! Of course, I am speaking of the pestilential virus that is disrupting our lives yet again. Things were not exactly calm back in late 2021 with the delta variety, but we thought that, with masks and mostly operating outdoors, it was manageable. This newer omicron form clearly operates at a completely different level in terms of contagion. Numbers of cases all across the US are nothing short of astonishing. Although I keep hearing of people who are pretty darned sick from it, I am willing to believe that it is less virulent than earlier versions and I am grateful for that!

In any case, we find ourselves at the Garden with, now, stricter protocols than ever before, including a vaccine mandate, as we try to support everyone in staying healthy. In light of Omicron, I have had to ask that volunteer activities be limited for now and I thank you for honoring that request and for being extra careful. We will take baby steps back to operations once it is clear that the storm is passing.

*Luminaria Nights* was wonderful! The nights were just right: cold enough to be wintery but not so cold as to be really uncomfortable. I hope that you enjoyed seeing the So Cal Gardens pathway out to the Forest Pavilion lit up for the first time ever! The beautiful new, smooth pathway was adorned with luminaria! Both of the musicians who played in the Forest Pavilion absolutely loved the space—as did our guests. Thanks for all that you volunteers did to support the event. I am very glad that your drink and bake sale event did well as I know that you have been somewhat thwarted in your normal fund-raising means (no) thanks to COVID. To those of you who would help support the new pathway and do not yet see your commemorative brick: not to worry! it is coming. Basically, the opportunity to get the paving done came before we had the bricks prepared. Once the engraved bricks are prepared, the contractor will prise up appropriate bricks to be replaced with yours.

Speaking of the Forest Pavilion: it is essentially done in terms of the contractor’s responsibilities and we now turn to what is in our court to do. This includes the landscaping: an irrigation system has been installed and Peter and the hort staff are contemplating planting. We have somewhat revised the plan for the demonstration garden areas to reflect the site as it is emerging from construction, with very positive results. I cannot wait to see the Sally & Skip Prusia Sun Garden and the Marilee Scaff Arroyo Garden. These names will, of course, remind us for the very long run of the importance of our volunteer corps here at California Botanic Garden.

Other capital projects are marching along, large and small. Toward the large end of the spectrum, the solar power system for the Seed Bank is almost done. Toward the small but important: many of you will be happy to know that we will be fixing that dangerous patch of uplifted concrete around the palo verde tree in the Outdoor Gallery in the third week of January.

I hope for volunteer involvement in another project, which is to revise the Garden map that guests are given. There are both positive reasons to revise it (e.g., to add the Forest Pavilion and the restroom facility there) and less positive, by which I mean problems with the current map. Those problems include the fact that the plant communities area is not drawn to scale and that the trail system is mostly pretty schematic. Jennifer Scerra has already done a draft ‘redo’ of the map that staff are working with. I intend to schedule at least one session with volunteers to get your feedback and input on the map before we finalize it. If you are especially interested in the map, feel free to be in touch so that we can be sure that you are part of that group.

And onward into 2022! Thanks, volunteers, for all that you do. We will get there!
California Botanic Garden Bench Brigade
by Julie Scheuermann

Visitors to the California Botanic Garden enjoy finding benches tucked among the plant displays. Benches provide a place to rest where people can quietly sit, view the Garden, and discover details unnoticed when strolling.

The placement of benches, usually by families in honor of a family member, began in the 1980s. The cost is $10,000 for a placement that lasts twenty years and placement options are available. At the end of the twenty-year period, the placement can be renewed for a lesser amount, or the bench retired. When retired, the plaque is removed and given to the family. There are currently about 85 benches around the Garden.

The Bench Brigade was formed by volunteers to help Garden employees keep the benches clean and inviting. Barbara Hughbanks was a long-time Bench Brigade manager. The brigade also cleans picnic tables and the furniture in front of the administration building.

The Bench Brigade currently has twenty-two members, plus a waiting list. Each member is responsible for a group of from two to nine benches. The member’s benches are usually located near each other, with cleaning supplies conveniently located at three different locations.

Each bucket of supplies contains two different cleaning solutions, water, rags, and an assortment of brushes. If you see someone walking through the Garden with a bucket, they are probably cleaning benches. During the process the benches are brushed clean, washed with a liquid cleaner, and then rinsed, dried, and sprayed with Murphy Oil Soap. Dirty towels are collected and washed weekly by brigade member, Herb Boss.

One problem is the durability of the finish applied to some of the benches. On some, the finish is peeling or completely gone. California’s environmental laws restrict the finishes available for use and those are often degraded by the intense sun. Volunteers currently refinishing benches try to protect the finish by placing them in shady locations.

Please take advantage of the benches when you visit the Garden. They are there to enhance your visitor experience.

Grapevine Harvest and Wreath-making
by Linda Prendergast, Chair, Native Designs

I hope by the time you read this that Covid is a distant memory, and that your Irish eyes are smiling, because we volunteers have work to do!

Thursday, March 17th is St. Patrick’s Day! It is also the date of The Great Grapevine Harvest and Wreath-making Event and ALL VOLUNTEERS are invited to participate! We will all be honorary Irish-persons for a day as well as grapevine pruners and wreath-makers. It has been two years since we attacked those flourishing vines on the east fence, and they need to be subdued. Normally held in January, the pruning was re-scheduled for March because we found the vines are more flexible and easier to weave in the spring.

Vine pruning begins at 8:00 a.m. under Peter Evans’ direction. Bring your own pruners (or shillelagh), gloves, and bottled water. We will work in teams on both sides of the fence, gathering the longest vines to deliver to the wreath-makers. No experience necessary and the more volunteers, the merrier. This is “stand-up” work...no hands and knees! Extra snips will be available if needed.
Wreath-making will start at 8:30 a.m., coached by the Native Designs crew—again, no experience necessary. We will have six to eight work stations with wooden jigs to shape and form the wreaths. Because physical space is limited, wreath-makers need to sign up for a shift.

The Leprechauns from the volunteer Hospitality Committee will treat us to a grand and glorious Potato Feed when the work is done. There will be baked potatoes aplenty with lots of toppings, plus tossed green salad and beverages (alas, no Irish whiskey). We will eat outdoors for safety’s sake.

Come join your fellow volunteers for a socially distanced morning of grapevine pruning and wreath-making. This is an opportunity to reconnect with veteran volunteers and meet the new folks that have joined the ranks. No matter your skill level, we can use your help on Thursday, March 17th. Sign up on Volgistics and meet in front of the Lenz Classroom at the Hort Building. Please wear your nametag (and a spot of green!)

(Re)PLACE
By Peri Lee Pipkin

The (Re)place exhibit has been in progress for several months and hundreds of unique pieces of art have been added to artist Brandon Lomax’s public installation. We’ve had participants from all age groups and walks of life come to the Garden and enjoy the intersection of art and California native plants. Many people have found the creative process relaxing and curative, restoring their social connections in a safe, outdoor setting that so many of us lost during the pandemic. And this feeling is no accident; conceptually, the underlying message is very powerful. Clay is a material drawn from the earth, and we are incorporating seeds into it and creating temporary art pieces. The idea is that these pieces will dissolve back into the earth with natural rain and weathering, and in their place native wildflowers will bloom in the springtime where the sculptures once stood. This process is a great meditative action for everyone, especially during pandemic times when stress and loneliness are rampant. The creation of temporary pieces reminds us that everything is passing and temporary, and that we can create something fun and beautiful without expectation or permanent end goals. Flower-filled, sunnier days are eventually ahead, and processes such as these can help us get there. This is especially poignant as the Garden deals with the aftermath of the January windstorm and begins to restore and rebuild. The (Re)place exhibit reminds us not only that we can rebuild from the harsher moments of the pandemic, but that the Garden will once again rise from the destructive wind forces that altered the landscape so devastatingly. We invite you all to join a workshop before the conclusion of the exhibit in May and experience this process for yourselves.
**CalBG Volunteer Shirts**

by Betsy MacLaren

We are excited to announce the availability of new volunteer shirts. These shirts will feature the new California Botanic Garden logo with the Matilija poppy. An e-mail was sent to all volunteers in February with information for ordering the shirt(s). You will have until the end of March to order.

A small group of volunteers researched the shirts and were fortunate to find a local vendor in Upland. To provide a wide choice of shirt styles and fabrics for both men and women, we have 13 choices, including polo shirts, long-sleeved denim shirts, and vests. There are three color choices—blue, green, or gray—with a sizing chart for each shirt type.

Payment for each shirt will be collected before the order is placed. Please make checks out to “CALBG Volunteers” and mail them before March 31st to: Betsy MacLaren, 451 St. Augustine Avenue, Claremont, 91711. The shirts are for volunteers only, but you may order as many as you like. All orders will be verified with you for accuracy.

If you need more information, please call or text Betsy at 951-217-7913.

**Bulbs, Corms, etc.**

by Steve Bryant

Generally, plants from these organs are winter-growing, spring-blooming, and dormant in summer and fall. See also www.pacificbulbsociety.org.

**Lilium humboldtii, L. pardalinum, and L. parryi** (Humboldt Lily, Leopard Lily, Lemon Lily). A dozen or so *Lilium* spp. are native to CA, many rare; *L. pardalinum* is the only one usually available. To 2 m tall. *L. humboldtii* and *L. parryi* are “Tiger” lilies, orange with darker spots, and unscented. *L. parryi* flowers are yellow and very fragrant.

**Calochortus plummerae** and **C. splendens** (Mariposa [Butterfly] Lily). Of about 50 spp. of *Calochortus* in CA, these are locally common. Leaf over 30 cm long, inflorescence with several flowers to 70 cm tall; often weak-stemmed. *C. splendens* has lavender flowers, *C. plummerae* purple and yellow. *Calochortus* is a gem of our flora. Species and hybrids available.

**Chlorogalum pomeridianum** (Soap Plant). Many basal leaves to 70 cm long, 2.5 cm wide, with wavy edges. Inflorescence to 2+ m with many scented, whitish flowers. Crushing the large bulb’s fibrous coat in water makes a soapy solution. Volunteers.

**Bloomeria crocea** (Goldenstar). Narrow leaf to 30 cm with inflorescence to 70 cm. Bright yellow flowers in an umbel. Showy en masse, especially with blue annuals like *Lupinus nanus*. Volunteers freely.

**Dichelostemma ida-maia** (Firecracker Flower). A North Coast species, but grows well here. Narrow leaves to 50 cm, inflorescence to 70 cm, red tubular flowers with a white tip to 2.5 cm long by one cm wide.
\textit{Dipterstemon capitatus} [formerly \textit{Dichelostemma}, formerly \textit{Brodiaea}] (Blue Dicks). One of our most common corms; leaves 10 to 70 cm long and umbels of light to dark purple flowers that attract butterflies and bees. Blooms in early December after a rainy fall. Volunteers freely and can be invasive.

\textit{Muilla maritima} [\textit{Muilla} is \textit{Allium} [Latin for garlic] spelled backwards] (Common Muilla). Locally common with leaves over 10 cm long, and white one cm diameter flowers in umbels.

\textit{Allium fimbriatum} (Fringed Onion). About 60 spp. of wild onion in CA; this is one of the more available. Narrow, round leaves to 20 cm, inflorescence to 50 cm; purplish flowers in umbels. With water, not summer dormant. Foliage onion scented.

\textit{Sisyrinchium bellum} (Blue-eyed Grass) and \textit{S. californicum} (Yellow-eyed Grass). Iris family, with clusters of narrow leaves to 20 cm and inflorescences to 30 cm. \textit{S. bellum} with blue-purple flowers, \textit{S. californicum} with yellow flowers, both more than one cm in diameter.

Cultivation and Acquisition: \textit{Lilium} and \textit{Sisyrinchium} best with at least afternoon shade. \textit{Sisyrinchium} needs plenty of moisture. Others take full sun; all need water winter through bloom. Available from specialists.

\textbf{Agave and Native Americans by Shaunna Gygli}

\textbf{Agave deserti} (agave), a native to the deserts of Southern California, forms rosettes of fleshy leaves 20–70 centimeters long and an inflorescence 2–6 feet tall. In 20–40 years it flowers once and dies. In our area agave are abundant above 2,000 feet on Highway 74 (Palms to Pines Scenic Byway).

Agave was an important fiber and food source to the Cahuilla, Kumeyaay, and other desert tribes. They used its fiber to make bow strings, shoes, skirts, snares, and baskets. For eating, the flowers were boiled to remove their bitterness. If not harvested, the flowers produced seeds that were pounded into flour. The leaves and stalks were pried out of the ground just as the stalk was forming. They were roasted in large pits and eaten, or formed into cakes, dried in the sun and eaten later. Because many tribes lacked access to this plant, it also was a valuable trade item.

The Malki Museum near Banning was founded on a California reservation in 1964 and operated by Native Americans. They annually harvest and roast agave on two Saturdays in April.

The first Saturday the agave are harvested. On the second they are brought back to the museum and roasted for three days in a rock-lined pit.

Garden volunteer Yvonne Wilson and I joined a harvest and learned how to identify agave for harvesting. Looking into the rosette, the bud of the stalk should be six inches or less. If taller, the stored sugar has been used in the growth process. A digging stick, made from a hardwood branch such as oak, is sharpened into a chisel-like tool. Removing the stalk from the roots requires a lot of strength. Yvonne and I watched! The area we were in, off of Highway 74, is awe inspiring. You can see agave stalks from six inches tall to some six feet tall ready to flower. And interspersed are the wildflowers. Old roasting pits were pointed out by the museum people.

At the museum, a pit about three feet deep and about four feet across has been dug and lined with carefully chosen rocks that won’t explode in the cooking
process. Wood is allowed to burn down to coals before the agave stalks are placed, and then covered with a metal plate to keep the heat in. The agave hearts are served with other customary Native foods.

Contact the Malki Museum for reservations for this really informative and fun event.

**CalBG graduate student**

by Peri Lee Pipkin,

My name is Peri Lee, and I’m a new graduate student here at the Garden. I’m from the mountains of northern Taiwan. My undergraduate studies were in both natural resources, where I focused on applied ecology and botany, and ceramic art. As a second-generation potter fascinated by the natural world, my interests are linked by a fascination for soil substrates, which is manifested through working with clay and studying plants. I think studying natural resource conflicts can help us understand the underlying causes of conservation biology issues and protect vulnerable species and ecosystems on our changing planet.

My master’s thesis project will be a floristic inventory and soil substrate survey in the Silver Peak Range of Esmeralda County, NV. This range sits in a remote corner of western Nevada, on the border of eastern California. It has an unusual geology that bears both interesting plant communities and mineral-rich soils, some of which are notably high in lithium. Because of this, the region is a rapidly growing hot spot for proposed lithium extraction and geothermal development, both of which are sought after in our transition to renewable energy. By significantly increasing scientific knowledge of Nevada’s largely under-documented flora, we can make land management decisions to maximize protection of plant diversity. Despite the lack of botanical documentation, we know that the Silver Peak Range is home to endemic species such as Tiehm’s buckwheat (*Eriogonum tiehmii*) and Tecopa bird’s beak (*Chloropyron tecopenseis*). The proximity of the Range to other specialized habitats, such as the White Mountains and Death Valley National Park, as well as the presence of unique ecosystems like the alkali wetlands, suggests high levels of species richness and endemism. This region also sits within the transition zone between the Great Basin and Mojave Desert, and includes the northernmost extent...
of the Joshua trees (*Yucca brevifolia*). This species is predicted to undergo widespread extirpation in the southernmost part of its range. These factors have underscored the urgency and importance of a regional floristic inventory and compelled me to dive into this research.

**BOOK OF THE MONTH**

**Gene Baumann, Volunteer Library Committee**


*California in a Vase* is arranged seasonally with native California plants supplied by The Gottlieb Native Garden and California Botanical Garden. It is written by David Bryant (CalBG’s prior Director of Visitor Experience), with a Forward by Susan Gottlieb, Preface by Lucinda McDade, PhD, and Introduction by Linda Prendergast. The Native Designs Volunteer Group at CalBG, led by Linda Prendergast and Carol Petty, as well as many CalBG volunteers, is rightly acknowledged as being a significant part of this collaboration. Lucinda McDade and Linda Prendergast have used this book in numerous outreach webinars given to various garden clubs and classes.

This is a sumptuous, joyous, and hopeful book that is well worth another look for those who have already purchased it and a first look for those who wish a feast for their eyes. Following the intense winds of January and loss of significant specimens at CalBG, this book stands as a testament that nature will recover and thrive again.

The Volunteer Library Committee thanks CalBG for the generous donation of this book to the Volunteer Library. We highly recommend that this book be purchased and read frequently with both the eyes and heart.

*California in a Vase* is a wonderful gift idea for any occasion, but especially ideal for Mother’s Day. It can be purchased at the CalBG Poppy Shop (immediately behind the entry kiosk).

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**A Very Happy March Birthdays**

Mark Kay  
Dipaali Reddy  
Michelle Small  
Sharon Thompson  
Kathy Roth  
Christopher Jarosz  
Lee Waggener  
Arlene Noreen  
Gloria Slosberg  
Joan Sweeney  
Harmut Wisch  
Lisa Donnell  
Sid Tice  
Lisa Broderick  
Lynn Miller  
Olga Lobaco  
Charles Gale  
Pauline Assaria
SAVED FROM THE STORM

Above: Majestic Oak, photo by Patricia Brooks
Below: CalBG Flower Garden, photo by Patricia Brooks
Top Right: Near miss for one of the benches, photo by Marla White
Bottom Right: Boojum Tree still stands, photo by Cheryl Birker
Lost to the Storm

Below: Tree service truck, photo by Marla White
Tree cleanup, photo by Muriel Fernandez
Wood donated for Fairplex project, photo by Marla White

Right, top to bottom: Manzanita, photo by Ming Posa
Grow Native Nursery damage, photo by Alejandra Soto
Administration Courtyard, photo by Ming Posa
Downed tree by bench, photo by Ming Posa