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Wilson

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No Chair

Hospitality: No Chair

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Tom White

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Public Relations:

Dorcia Bradley

Native Designs:

Linda Prendergast

Oak Notes

Editor: Patricia Brooks

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Web Publisher: Ming Posa

The deadline for articles to be submitted for the November 2022 issue of OAK NOTES is **Saturday, October 15.** Thank you for your prompt submission!

Volgistics reminder: Please submit your monthly volunteer hours to Volgistics. Every volunteer minute counts.



FROM THE PRESIDENT Lynn Miller, Volunteer President

As I write my message, fall is exactly one week away. There is no doubt that the last few weeks of summer were sizzlers, and our volunteer activity at the Garden slowed down to a saunter. However, it's now October, and volunteer opportunities are opening up. One of the joys of volunteering at CalBG is sharing a shift with others, and for many, time together has led to deep friendships. The Native Designs Wreath Decorating workshops last month come to mind. The Garden Guides met in late September over a light breakfast then enjoyed a refresher walk to review our two school tours. We have missed leading our school tours, but we have really missed seeing and learning from each other.

Mark your calendars for Friday, October 7, for our Welcome Back Quarterly Meeting and Luncheon. We will gather in the Forest Pavilion at 12:00 with tram service starting at 11:30. The Forest Pavilion is a delightful place to start the volunteer year and to learn more about volunteer opportunities. Watch your email for updates.

After many months of watering cutbacks that ended in crunchy lawns, it's time to rebuild our gardens. The Annual Native Plant Sale starts October 12 (Acorn Members), and then opens to members and the public on the 15th. If you took the Native Gardening classes offered this summer, you have a head start on your prep and planning, and now it's time to plant. The Grow Native Nursery needs help on Thursdays, and positions are open during the Plant Sale. Please check the options on Volgistics.



The good news is that volunteer positions are now available. Possibilities include: Shuttle Drivers, working in the Production Nursery, the Herbarium, Native Designs, Garden Guides, the Hospitality Committee, the Public Relations Committee, Enrichment, Grounds Crew, and Special Events.

Some positions are limited, and several call for some training. If you have questions, please email Ming Posa, mposa@calbg.org.

With crisp fall weather in the air and a new season ahead, I look forward to another year for volunteers to gather, to learn, and to help at CalBG.

Thank you, one and all, for your care and dedication to the Garden.

-Lynn



FROM THE DIRECTOR Lucinda McDade, CalBG Executive Director

Interactions Garden

"What's up with the Butterfly Pavilion?" is a question I am often asked. I could write an entire article—a long one—on the issues that we faced in running the old pavilion (as much as I also loved it!). They extend from vermin (lizards, rodents) eventually figuring out how to get in - no matter how hard we worked to critter-proof the enclosure—and devouring all the butterflies (very demoralizing for staff and volunteers - not to mention the butterflies themselves!) to heat. High temperatures—especially if accompanied by high overnight temperatures—are hard on the butterflies, hard on staff and volunteers, and visitors just don't come during extreme heat in any case. Also, what to do with it over the nonbutterfly season? It just sat there looking a little sad. All of this added up to a money losing proposition for CalBG.

Enter the idea of a butterfly garden richly planted with both nectar plants and larval host plants, and with lots of interpretive signage explaining the plantanimal interactions, butterfly life cycles, etc. We have been thinking along these lines for a while. Happily, former volunteer Marilee Scaff's family agrees that an outdoor garden is a very good idea and a plan for the Marilee Scaff Butterfly Garden began to take shape.

Another wonderful former volunteer, Marcia Goldstein, loved both native plants and birds—all

kinds of birds. Her family wishes to support the creation of a Marcia Goldstein Bird Garden here at California Botanic Garden. This new area will feature plants that birds use in all ways: food, nesting, cover. Imagine a graceful water feature that will include a basin large enough to function as a bird bath. Again, lots of interpretation will make the area informative regardless of whether staff or volunteer docents are available.

Idea! Let's join these two wonderful volunteers and their fascination with the natural world under the umbrella of The Interactions Garden. There is plenty of overlap between butterfly and bird plants, and plenty of opportunity for synergies by combining the two garden areas.

Next: where to put it? Imagine that something positive came out of the windstorm! The wind storm cleared the area east of the outdoor classroom and north of the Native Designs Garden, also encompassing the site of the former butterfly pavilion. Bingo: that is where the Interactions Garden should go! The Outdoor Classroom provides shade and secure places to store the interpretive elements (e.g., chrysalis board, boxes of pinned butterflies, birds' nests, mounts, books). This means that we can staff the Interactions Garden during high periods, with staff and/or volunteers present during peak visitation hours to extend and facilitate learning—and enjoyment—by guests.

Happily the area north of the Native Designs Cutting Garden is ample for *both* the Marilee Scaff Butterfly Garden and the Marcia Goldstein Bird Garden. Peter Evans is hard at work on a design for the Interactions Garden as I write. Jennifer Scerra will likewise be hard at work to design interpretive signage. Our hope is to be able to plant over this coming rainy season.

I hope that you volunteers will be as enthusiastic about this new garden area as you were about the Butterfly Pavilion. Among other things, with the Outdoor Classroom adjacent to the garden, we will be able to provide you with shade as you help guests to understand the magic and wonder of plant—animal interactions.



COMMUNITY EDUCATION

Jennifer Scerra, Visitor Engagement.Photos by Jennifer Scerra and Marla White

Rethatching the Tongva Village Kizh

A big thank you to a group of intrepid volunteers who worked to make sure that *Kizh* in the Tongva Village were refurbished and rethatched this summer.

Because of the damaging sun, rain, and wind, the structures typically need to be rethatched about every other year. That was all set to happen in 2020, but as you can imagine, the work was delayed by shut downs, staffing changes, and the logistics of acquiring the materials. By the time the big windstorm hit earlier in 2022, it was a job that was several years late and urgently needed.



Luckily, we had a few volunteers who had worked on a rethatch in previous years and remembered how the process worked. Yvonne Wilson picked up and delivered hundreds of feet of heavy, rolled

thatching material from a seller in Long Beach. And Richard Griffon, remembering what tools were needed and the process, led the work group. Richard was joined by Marla White, Dan White, Elene



Kallimanis, and me, and for two warm mornings we stripped the old thatching material away and then hung the new.

There is still work to be done in that area, but the rethatching made a big difference. And it happened just in time: Bonita Unified School District is set to begin their district-wide visits to the Garden and will be using the space daily for several weeks this fall. Thanks again to everyone who supported the process!

Garden Guide Training This Fall

Have you ever considered becoming a Garden Guide? Not only is it fun and a great way to really get to know the Garden, it is also core to our institution's mission of education and engagement with California Native Plants.

Or maybe speaking to the public isn't really your thing. Consider becoming a Plopper! Ploppers help set up for school tours by delivering fun taxidermied animals, posters, and other educational materials around the Garden.

Currently, we are actively recruiting volunteers for both of these positions. Ploppers can learn on the job this fall, while New Garden Guide training is being planned for October. Contact me if you are interested or if you have any questions, jenniferscerra@gmail. com or 909.625.8767 x 206.



DIRECTOR OF ADVANCEMENT Amanda Behnke

Susanna Bixby Bryant Council

Named to honor the Garden's founder and first estate donor, the Susanna Bixby Bryant Council offers membership to all donors who choose to support the Garden through an estate gift. Members of this prestigious Council have signaled their strong support for the Garden and its mission. They have made a gift through a will, annuity, trust, or have named the Garden in a life insurance or retirement plan. Benefits include knowing that you impacted the Garden in a special way, invitations to the Majestic

Oak event, and an annual listing in the Honor Roll of donors. Some donors wish to remain anonymous.

To learn more, contact your financial advisor and/ or the Advancement Office at 909.625.8767 x. 222. Additionally, the Advancement Office has a handy guide for planning your legacy that can be helpful even if you are not donating anything from your estate to the Garden. If you would like to pick up or receive a copy, send an email to advancement@calbg.org.

KIOSK STAFF by Ariana Martinez

In recent months, Kiosk staff members at CalBG have received great opportunities to start internships, further their studies, and explore jobs in their fields of interest. Therefore, the Kiosk has been fortunate to find several unique individuals to bring onto the staff who are friendly, hardworking, and passionate about California Native plants. With all the new names and faces, introductions for each person seems fitting!



Lewis is a graduate student of Religion at CGU. When not interviewing conspiracy theorists, they can be found on their bike, watching birds, or writing folk music under the name Coyote Wall. Their music has been

enjoyed by many members of the Garden at our Magical Mondays events.



Ivy Rain is pursuing an Environmental Science degree at SNHU online. She was once a character designer in TV animation, but has recently chosen to focus time

on her passion for environmental conservation. She spends her free time being a bookworm, hiking with her mastiffs, and studying conservation techniques as a volunteer at the Redlands Nature Conservancy.



Eddie has spent several years traveling the world and volunteering on organic farms before settling back down in California. He is into anything oldies, whether it's books, music or film. To stay active, he likes to play handball,

swim, or go on long walks. Working at the Garden

has allowed him to unplug and be in touch with nature, while also giving a sense of fulfillment by sharing it with others.



Lauriana is currently studying sociology and ethnic studies at Mt. SAC, dedicating much of her time to do political organizing. She is also a talented musician, entertaining others by playing mostly Samba Jazz on either bass guitar or baritone

saxophone. In her free time, Lauriana enjoys reading and spending time with her friends and dog.

Antoinette is a free-spirited individual with a love for nature, landscape and travel photography. She had many interests during junior college and ended up with four associates degrees before studying Geography and transferring. In her free time, she likes doing tarot card readings, hanging with her cat, and drinking coffee.

WREATHS WORKSHOP by Linda Prendergast, Native Designs



Volunteers and friends of the Native Designs team worked in the Lenz Classroom September 11 to 18 decorating grapevine wreaths to sell at the Fall Plant Sale. Maybe you were there the day the vines were trimmed and wreaths were constructed—it was St. Patrick's Day. Many volunteers turned out to cut back the grapevines, and others shaped the wreaths. The wreaths dried in the rafters of a

garage in La Verne over summer, and now they are all adorned and ready to display. Native Designers worked morning or afternoon shifts for a week and completed about fifty wreaths. Some are autumn themed, some are holiday themed, some are garden themed, and some could be used year-round. And just for fun, each wreath is named by the designer that created it. Check out the amusing monikers!

The sale of the wreaths at the Fall Plant Sale is the largest "money generator" for the Volunteer Organization. The funds raised allow us to make generous contributions, either monetary or equipment purchases, to the Garden. Prices average about \$50 for the large wreaths and \$25 for the small ones. But there are also stars and hearts at various prices. One is undoubtedly perfect for your front door!



Left to right: Winter Serenity, Succulent Landscape, and Bouquet Toss.

Grow Native Nursery Fall Opening!

by Mariana Ramirez Rodriguez

A sneak peek on water-wise plants and a call for volunteer help

The start of the planting season and opening of the Grow Native Nursery is coming up fast! We have lots of exciting plants such as Desert Marigolds (*Baileya multiradiata*), Baja Fairy Duster (*Calliandra californica*), and the Mission Manzanita (*Xylococcus bicolor*). Of course, we will have all the plant favorites like the Woolly Blue Curls (*Trichostema lanatum*), Monkeyflowers (*Diplacus*), and various Buckwheat species (*Eriogonum*).

As we all know, California's drought has been extremely tough this year, which is why we are encouraging water-wise gardening. Water-wise gardening goes hand in hand with California native plants since they have evolved with this hot environment. Some water-wise plants that will be available at the GNN are White Sage (Salvia apiana), Centennial Ceanothus, Chuparosa (Justicia californica), and Canyon Grey Sagebrush (Artemisia californica 'Canyon Grey').

Another water-wise tactic that has become more popular is removing and replacing lawns. We

provided a class this summer with information on removing lawns, plus some lawn replacement recommendations. One of the most popular lawn replacements was the Frogfruit (*Phyla nodiflora*). Frogfruit is a great fast-growing perennial groundcover (only 1–3 inches in height) with small white-pink flowers. It does well in full sun, good drainage, with some supplemental water. Feel free to let it grow out for the small flowers to bloom or cut it down like you would a regular lawn.

Nursery staff have been working hard getting these plants ready, but we also need your help! For four Thursdays, starting September 22nd, we ask for volunteers to help label plants and stock the GNN sales floor from 9 a.m. to 12 p.m.

We need assistance during the Fall Plant Sale as well! Volunteers can choose from multiple jobs including: Plant Holding Area Attendant, Checkout Line Attendant, Register Assistant, "Baggers," and Cart Drivers. There are three shifts to choose from and we'd appreciate any assistance!

The Acorn Member Pre-Sale and Happy Hour will be on Wednesday, October 12th, from 4 to 6 p.m. The Fall Plant Sale will be on Saturday, October 15th, from 8 to 10 a.m. for Members and 10 a.m. to 4 p.m. for the general public. The GNN will also be open Sunday, October 16th, from 10 a.m. to 4 p.m.

Thank you all for your continued support of the GNN!

Bench Brigade



The Bench Brigade has reorganized its supplies with the help of Julie Scheuermann, Amanda Behnke, and Phil Majors. The supply box is now located on the north side of the Horticulture building.



VOLUNTEERS WANTED!

Our herbarium workroom is seeking additional volunteers to help us mount our specimens!

Mounting specimens entails handling dried plants, applying archival glue to specimens, and arranging them onto the herbarium sheet.

If you're interested in learning more about botany and the history of our collections, and in connecting with our community here at the California Botanic Garden Herbarium, then you'll want to join us as a volunteer!

We are looking for volunteers to join us on Tuesday or Thursday afternoons. Contact Rhay Flores, at rflores@rsabg.org to learn more.

What we do at the CalBG Herbarium: Obtaining Specimens

We receive deposits of dried plant specimens from a botanist, student, or another institution.

Mounting Specimens

Volunteers use archival quality materials to glue plant specimens onto herbarium sheets.

Processing Specimens

These mounted specimens go through our workflows of imaging, databasing, and curating.

Preserving Specimens

These specimens are then preserved in our herbarium and can last for hundreds of years, to be used for research or other scientific applications.

Introducing New Staff at the Herbarium!



Rhay Flores (she/her), Herbarium Workroom Manager/Curatorial Assistant

I recently graduated with a B.S. in Ecology, Behavior, and Evolution from UCLA. Iworked at the UCLA Herbarium from 2018 to 2020, where I learned how to process and collect specimens. During my senior year, I worked in the Santa Monica Mountains

with the National Park Service on establishing an herbarium on behalf of the native plant nursery's seed collection project. After graduating, I worked at an environmental non-profit focused on enhancing outdoor equity (Check out the Community Nature Connection!). I'm proud and excited to now be managing the herbarium workroom, and I look forward to getting to know all of the garden's volunteers!



Sara Dave (she/her), Project Manager (Curating and Digitizing the Sherwin Carlquist Collection)

My name is Sara, and I just started working as the Project Manager for the Sherwin Carlquist Project at the Garden last week! I graduated from UCSB in June and worked at the herbarium there for an academic year, which instilled in me an ardent passion for plants, natural history collections, and biodiversity libraries. I am so delighted to be working at the Garden where I can gain professional experience in working with preserved plant specimens and learn more about plants in general. Some fun facts about me are that I love to feed birds and squirrels (I even wrote my senior thesis on crows), and I am also a violinist!



A Very Happy October Birthday to:

Benjamin Mercier Bonnie Shimmin Kathy Henkins Alec Bryson Gordon Olson Jeremiah Sailor Haley Jensen Linda Lee Worlow Valerie Cressy Aria Garcia Benjamin Segura

COG STONES OF ANCIENT CALIFORNIA INDIANS by Shaunna Gygli

The cog stone is one of the most mysterious of Indian artifacts. They are found only in Southern California, and nowhere else in the world. They are named this because those with regular indentations resemble cogwheels. They are two to six inches in circumference with either smooth surfaces or indentations. Most are carved from basalt. They were made during The Early Milling Stone Horizon Period, about 7,000 years ago, and continued in use for over 2,000 years.

They have been found in Southern California from Malibu to La Jolla and inland to San Bernardino and the south side of the San Gabriel Mountains. Many were discovered on ocean bluffs, coastal hills, and along rivers and creeks. The only discovered manufacturing site with deposits of basalt is on the Bolsa Chica Mesa. About 60 to 70% of the carved cog stones came from this rock source.

Scholars are unsure of their function. They speculate that the stones were fishing net weights, ceremonial stone clubs, jewelry, or used in burial, medical, or religious ceremonies.

Armand Labbe, chief curator of Anthropology at the Bower Museum, thinks they represent sea stars, sea urchins, sand dollars, or fish vertebrae. They were placed along rivers, creeks, and ocean bluffs, during renewal ceremonies to replenish life.

The current view is that cog stones were ceremonial, in part because there is no evidence of wear. But their meaning or symbolism is debatable. They are puzzling and worthy of more study.





Cog stones have been found in our area, many in San Dimas (Mud Springs was the original name) and in the Puddingstone-Bonelli Park

area where Indian villages were known to be.



The single cog stone in the picture was found on Arrow Highway, west of San Dimas Canyon Road.

PARASITIC, HEMIPARASITIC, AND MYCOTROPHIC PLANTS, BY FAMILY by Steve Bryant

Convolvulaceae



Cuscuta (Dodder); several spp., almost indistinguishable except for their host plants. Tiny whitish flowers. Orange filaments (senescing to brown) twine over and through

various shrubs. *C. californica* commonly seen on Eriogonum in our area. Grow from seed or clumps of stems. Parasitic.

Ericaceae



Sarcodes sanguinea
(Snow Plant on left) and Pterospora andromedea
(Pine Drops on right). S. sanguinea has bright red, thick, aboveground stem; P. andromedea has a brownish stem.
Both have manzanitalike downward-pointing flowers (no surprise,

same family). Parasitic on mycorrhizal fungi (i.e., mycotrophic), which are symbiotic with conifers. Both in mountains throughout much of CA.

Monotropa uniflora (Ghost-Pipe) has whitish aboveground stems and in CA grows coastally from Eureka to Oregon. Resembles a whitish pipe stuck stem-down. Worth looking for if in the area.

Orchidaceae

Corallorhiza maculata (Coral Root). Flowers like tiny orchids, white and purplish; stems reddish brown. Mycotrophic; occasional in local mountains.

Orobanchaceae



Castilleja (Paintbrush, above). Brightly colored bracts surround less conspicuous flowers. Our common local sp. is C. foliolosa (Wooly Paintbrush, below), which generally has bright red bracts, but some plants have yellow bracts instead. Fairly easy from seed scattered near a host; many hosts, perhaps easiest is Salvia

mellifera. Hemiparasitic. Many spp. in CA.



Aphyllon (Broomrape). A. cooperi has purplish flowers on thick stems, up to 0.3 m tall. Reasonably common in deserts; other spp. in CA. Parasitic.

Pholisma sonorae (Sand Food), also with purplish flowers; aboveground part like

a thick pancake.. Restricted to Imperial County, CA, where ORV use has threatened this plant. Was eaten by indigenous peoples. Parasitic.

Viscaceae



Phoradendron (Mistletoe). P. leucarpum (American Mistletoe) with large green leaves and whitish fruits, common on Platanus, much used as holiday decoration. P. californicum (Desert Mistletoe), reddish, common on leguminous trees in deserts. P. juniperinum (Juniper Mistletoe), greenish-yellow stems especially on

Calocedrus and *Juniperus*. Birds (especially the *Phainopepla*) eat and defecate the seeds onto branches of other trees, where they germinate. Hemiparasitic.

More extensive reading at the following links:

Parasitic flowering plants from Wayne's Word https://www2.palomar.edu/users/warmstrong/plnov99.htm

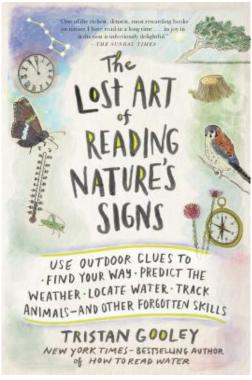
Saprophytic flowering plants from Wayne's Word https://www2.palomar.edu/users/warmstrong/pljune97.htm

Erratum



The photograph of a caterpillar in the September 2022 *Oak Notes* (page 3) was not of a monarch butterfly (*Danaus plexippus*), as was implied. It was the larva of a queen butterfly (*Danaus gilippus*). Monarch larvae have two pairs of black, sensory tentacles on their back (photo), queen larvae have three pairs.

BOOK OF THE MONTH Chris Ilgen, Volunteer Library Committee



The Lost Art of Reading Nature's Signs, by Tristan Gooley. The Experiment. 2015.

Tristan Gooley, English naturalist, writer, and teacher is credited with a "renaissance in the rare art of natural navigation." Close to home and across the globe, he has sought out easy ways for walkers to navigate using their senses and good sense. Using GPS or a compass is never mentioned, just 850 tips for finding one's way. Among his clues are: 1) Trees help us tell north from south. The north sides of trees will have larger

and darker leaves than leaves found on the south side; the north side of trees are wetter and darker which explains the presence of mosses; 2) Lichens are a sign of fresh air, which accounts for fewer of them near human population centers; 3) The size of raindrops can affect the colors in rainbows. Big raindrops lead to rainbows with brighter red bands.

Gooley encourages his readers to be observant. An initial exercise is to walk in one's own neighborhood with the intent of seeing and experiencing something new. Read the landscape using a technique he calls "get SORTED." "SOR" refers to an overview, and "TED" to finding clues within it. Chapters include ground, trees, plants, sky, stars, sun, moon, coast, rivers, lakes, and animals. In the book, Cooley takes the reader on titled walks: Rocks and Wildflowers, A Night Walk, A City Walk, Walks with Dayak (an indigenous tribe in Borneo). As a teacher, Gooley likes to take a class to an unfamiliar location and leave them to find their way back using only clues they have learned for navigation.

Reading Nature is an academic undertaking that I recommend. This book will be in the Volunteer Library and will be available for check out. The price for paperback is \$5.00 and up.

Gooley's other books include: *How to Read Water*, *How to Read Nature*, *The Natural Navigator*, and *The Nature Instinct*.



Fall is here:

time to come out of our summer dormancy!

Volunteer opportunities are open in the following areas:

- Fall Plant Sale and the Grow Native Nursery
- Tram Driving for Facilities Rentals
- Public Relations Outreach
- Production Nursery
- · Garden Guides for Community Education
- Herbarium and Library

Log into Volgistics to sign up or email Ming Posa mposa@calbg.org to indicate your interest!



FOREST PAVILION CELEBRATION SEPTEMBER 18, 2022

Photos by Marla White







