

CALIFORNIA NATIVE PLANT SOCIETY San Diego Chapter Newsletter

CHAPTER MEETING

June 21, 2022 In-person Meeting Casa del Prado Rm 101, Balboa Park Used Book Sale – 6:00 pm



Shop the best collection in the entire State of new & used books on all aspects of California native plants from children's to reference books.

Presentation – 7:15 pm Plants of Catalina Island by Kevin Alison

The most common native plant communities of Catalina Island are chaparral, coastal sage scrub, island oak-ironwood woodland and grassland. About 400 species of native plants grow on the island. Six species, subspecies or varieties are endemic and can be found only on Catalina Island: Catalina manzanita (Arctostaphylos catalinae); mahogany (Cercocarpus traskiae); Catalina dudleya (Dudleya hassei); St. Catherine's lace (Eriogonum giganteum var. giganteum); Santa Catalina bedstraw (Galium catalinens ssp. Santa Catalina Island catalinense); and ironwood (Lyonothamnus floribundus ssp. floribundus).



Kevin will discuss some of these and other plants of the island.

Kevin Alison earned a Masters of Conservation and Restoration Science (MCRS) at U.C. Irvine and is currently the native plant production specialist (R&D) at Tree of Life Nursery.

NATIVE GARDENING COMMITTEE

June 14; 7:00 pm Zoom Meeting Bee-ing a Better Gardener: Using Research to Support Native Bees in the Garden by Dr. Christine Casey

Summer is just around the corner and the pollinators are out in full force. Our next meeting Zoom will feature UC Davis entomologist Christine Casey. She will review the biology and identification common California



native bees in gardens, and also look at recent research in California and elsewhere that has identified important plants and design features to include in bee-supporting gardens.

Register at this link: <u>Bee-ing a Better Gardener</u> or go to cnpssd.org/events.

Sign up early - space is limited to 100 attendees.

The NGC May 10 Potluck Meeting

The NGC May 10 Potluck Meeting at **Judie Lincer**'s home was well attended and new members were welcomed. The NGC gets frequent questions about planting natives in containers, so Christine Hoey gave a short demo on types of plant containers to use, soil, planting techniques and watering. Supplementing with fertilizers and mycorrhizae became a lively group conversation.



Above: **Judie Lincer**'s garden. Photo credit: **Silke Gathmann**.

Committee members were given a handout which included a list of native plants that do well in pots for sun and shade. A variety of native plants were also shared with the group.

Native West Nursery Tour Thursday, June 10; 9 - 10 am



Get to know your local native plant nursery by signing up for a 'behind the scenes' tour! Registration is limited and Native West Nursery is happy to

take plant pre-orders. To see their plant availability, go to nativewest.com. You will be able to purchase and pick up your order on the day of the tour.

To register and submit your native plant pre-orders,

go to this link: Native West Tour Sign Up

Native West Nursery is located at 1755 Saturn Blvd., San Diego, CA 92154. Parking is limited, so carpooling is highly recommended.

June in the Native Garden

We are now entering our "dry" season and rainfall will be rare until October. Coastal gardens are still on the cool side



Hairy honeysuckle (*Lonicera* hispidula) Photo: Christine Hoey.

compared with the hotter inland areas. Some native gardeners provide no supplemental water during the summer and do not mind if a few of their native plants go into dormancy.

With our summers becoming hotter, some of our gardeners are reporting losing "healthy" native shrubs and trees that used to do fine without summer water. Since winter rains have been more on the "lean" side, the ground soil is not being recharged with water that native plants can tap into over the summer. We are seeing more native gardeners moving to summer supplemental watering by soaking the soil around the roots and surrounding area every 3 weeks.

<u>Watering tips:</u> (includes hand watering, overhead irrigation and using drip)

- If you are using irrigation, now is a good time to check lines, do repairs and make adjustments.
- Early morning watering is best when the soil is still cool
- Established gardens will thrive with a deep soak every 2-3 weeks. Avoid watering on days where the temperature is above 90° F.
- Gardens less than 2 years old will benefit from a more frequent watering schedule of every 7-10 days for fast and moderate draining soils.
- Coastal gardens and gardens with clay soil can get by with watering every 3-4 weeks.
- Allow the soil to dry out between watering.
 Remember, soggy soil promotes root pathogens and disease.
- Get to know your soil moisture periodically, use a trowel to dig down 3-4" to see if it is wet or dry, or use a moisture meter.
- Santa Anas: water in the morning <u>the day before</u> a Santa Ana is due to arrive.

Add mulch as needed: it keeps the soil cool, helps retain soil moisture and reduces weed growth. Mulch materials include decomposed granite, gravel, rocks, or wood (chipped, shredded redwood).

<u>Pruning & Maintenance:</u> deadhead spent flowers, pinch back ceanothus and manzanitas for a fuller foliage. Remove dead wood and annuals past their prime, especially if you are in a fire risk area.

Bird Park Update

Our workgroup recently planted buttercups (*Ranunculus califoricus*), checkerbloom (*Sidalcea malviflora*) and California poppies (*Eschscholzia californica*) in the meadow area, along with weeding and general maintenance. Measurements have been taken on the south plot next to ours - now, the fun part begins with designing it in a CAD program! **Volunteers are needed** for the following:

- People with native landscape design experience to assist with the design and irrigation plan.
- Site prep (weeding, removing non-native plants, etc.)
- Native plant installation this fall.

Sometimes, the best way to learn about native plants is to volunteer and get "hands on" experience! If you are interested

in volunteering for Bird Park, sign up at this link: <u>Bird Park</u> Workgroup



Bird Park May 2022 Blooms. Photo: Christine Hoey

What's blooming now in Bird Park: Ceanothus 'Ray Hartman', seaside daisies (Erigeron WR), yarrow (Achillea millefolium), white sage (Salvia apiana), California poppies (Eschscholzia californica), toyon (Heteromeles arbutifolia), and more! Come on over and see how this native garden is growing near Thorne St. and 28th St, San Diego, 92104.

How Many Birds Flew Over San Diego Last Night? BirdCast Can Tell You!



Yellow Breasted Chat Photo: Wikimedia

Cornell Lab of Ornithology has developed a new way to view the massive migration of billions of birds across the night sky. For any county in the lower 48, BirdCast can now give details on the number, speed, direction, and altitude of the birds cruising through darkness on spring and fall nights. It will even suggest which species are most likely. Not a night owl? You can catch

up with the previous night's action the next day at this link: <u>BirdCast</u>. The live feed runs from March 1 to June 15 (spring migration and August 1 to November 15.



Join CNPS as a New Member

Did you attend the garden tour and decided you would like to become a CNPS member? Join as a new member for **40% discount** through June 30, 2022, by scanning this QR code. Discounts are applied at checkout.



California Native Plant Society

Member Benefits include:

- 1. 10% discount at the following plant nurseries:
- Moosa Creek (use CNPS as the discount code at checkout)
- Mission Hills Nursery (discount applies to everything!)
- El Plantio Nursery
- Tree of Life Nursery
- 2. Quarterly issues of Flora and Artemisia magazines
- 3. Local event discounts and more!

Join the Native Gardening Committee

If you love gardening with California native plants and would like to join the Native Garden Committee (NGC), sign up here: Join NGC. A separate monthly email is sent out to members with meeting announcements, volunteer activities, workshops and early bird sign-ups that don't always make it into the Chapter newsletter. We would love to see you!

Natively yours,
Christine Hoey

PROPAGATION COMMITTEE

Co-chair Needed

This is an unpaid, volunteer position. Estimated time commitment each month is 15-20 hours. The committee's goal is to meet once or twice a month at our space in City Farmers Nursery or via online educational meeting. We work to make connections with members who are excited about propagating plants, we exchange ideas and information, and we grow plants for chapter sales.

Please submit a cover letter that addresses your strengths in relation to the job description and areas that you are less comfortable with (please note you do not have to be good at everything listed I just want to get an idea of how I can split the work with you and if we will be a good fit in getting all the leadership work accomplished.) Send materials to propagation@cnpssd.org. You may email questions prior to deciding whether to submit a cover letter.

Some desirable strengths include:

- Recordkeeping: report volunteer hours to CNPS board, update board for their monthly meetings, send event emails and reminder emails, collect and file waivers
- Leadership and organization skills: help facilitate at least one in-person meeting per month at City Farmers Nursery, help plan and facilitate one online Zoom meeting per month.

- Propagation knowledge: knowledge of or a willingness to learn scientific principles of propagation.
- Education: willingness to work with volunteers of all skill levels to accomplish the goals of the propagation group.
- Inclusivity: you must uphold the CNPS Justice, Equity, Diversity, and Inclusion Commitment
- Planning: ability to coordinate monthly activities with cochair and propagation committee members in advance via email or phone.

What else should be on this list? What can you bring to the group that isn't listed here? We'd love to hear from you!

~ Amy Huie, Propagation Chair

CNPS-SD BOARD NEWS

June 1, 2022 Board Meeting

Wednesday, June 1, 6:30 – 9:00ish p.m. The meeting will be via Zoom. To add an issue to the agenda, or to get the link to the meeting, please email president@cnpssd.org.

May Board Meeting Summary

The board approved the following:

• Accept the Treasurer's report for the fiscal year ending March 31, 2022.

Other items discussed by the board included: a fall plant sale, a native plant festival, returning to in-person chapter meetings in Balboa Park, Justin stepping down from being the chapter President, scholarships for the native plant class at SDSU, Chapter Council hybrid meeting on June 4 (so that members won't have to travel from all over the state to attend, thus helping to meet the CNPS carbon neutral goals), the recent garden tour, and storage of our materials at the North Park storage facility and at Balboa Park.

The meeting adjourned at 8:52 pm.

~ **Bobbie Stephenson**, Chapter Secretary

CONSERVATION

Conservation Committee Meeting

Contact conservation@cnpssd.org for meeting information.

Silphium, White Sage, and Burning

Over the years, I've occasionally written about silphium. Here I'm not talking about the genus *Silphium*, which are gorgeous and rare tall prairie plants that I remember fondly from Wisconsin. Instead, I'm talking about an extinct fennel relative that grew in ancient Cyrenaica until it disappeared during the reign of Nero. For 1,500 years or more before that, it had been

popular in food, as perfume, and also as an herbal contraceptive. It purportedly was worth its weight in silver, and its export made Cyrenaica wealthy. It was never domesticated, and researchers still argue about what combination of overharvesting, overgrazing, and local climate change wiped it out.

Why do we care? Well, like all members of the Apiaceae (the carrot family), silphium had these little two seeded fruits. Because of their value, they showed up in art from the Minoans on. You actually know it quite well, because it's where we get our symbol for a heart: •. Our symbol of love is an extinct herb.

The other reason to care is that silphium's home range was on the seaward side of what is now Libya's Jebel al-Akhdar plateau, a strip of land about 30 miles wide and 125 miles long, basically like the coast of San Diego County. Silphium was the first in a long line of plants that were overharvested in their limited native ranges and either became rare or went extinct.

For several years now, thanks to the efforts of Rose Ramirez and Deborah Small, we've become aware that white sage (*Salvia apiana*: Photo below: Calscape), a California native that mostly



grows on the coastal sides of mountain ranges locally, is being overharvested and poached for a burgeoning trade in sage smudges, egged on by Hollywood's embrace of a New Agey smudge in

the abalone shell version of more traditional Native American smudging rituals. As with the Dudleyas, CNPS is encouraging everyone to fight back by growing their own white sage and encouraging others to plant more of it, to destroy the market for the poachers. The new video *Saging the World* is about this problem, and you should see it.

The deeper issue is human's relationship with fire. If you believe anthropologist Richard Wrangham's argument (*Catching Fire: How Cooking Made Us Human*), humans literally coevolved with fire. The ability to cook food meant that we could have weaker jaws and smaller guts than other apes, freeing up all the resources and energy from our GI systems to produce more children and bigger brains. All fire does is to oxidize organic material, releasing the sunlight stored in it as heat, so even if we don't cook over wood fires much anymore, using heat to make solar panels, wires, and electric cook tops is just an elaboration of our multi-million-year relationship with fire.

From here I'm going to segue from our human need to burn things into talking about the Intergovernmental Panel on Climate Change (IPCC) 6. As pretty much anyone who's paid attention knows, the current IPCC round of reports says that, as a species, we're not seriously trying to make any headway in reducing out greenhouse gas emissions. If you believe humans coevolved with fire, the news that we can't stop burning things as easily as some might want us to should come as no surprise at all.

The latest IPCC 6 report, out a couple of months ago, includes a number of models for the future, but they fall into three classes. One class is business as usual, where we release enough GHG's to cause 3-4°C of climate weirding. This will take many decades

to happen, and it will cause damage global to economies equivalent to perhaps half the current US GDP, or 1/8 global GDP, per year. Most likely much of this will never get fixed, and that's how civilization as we know it goes down.



White sage (Salvia apiana).

Photo: Calscape

In another set of models, civilization

devotes about 30% of its GDP annually to sequestering carbon for the foreseeable future, and goes on about business as usual as best it can with the other 70% of its economy.

In the third set of models, civilization devotes 10 to 15% of its GDP annually to sequestering carbon for the foreseeable future, and also substantially decreases annual energy use each year. The difference here is that by using less energy, we produce fewer GHGs, so we can get by with sequestering less.

This isn't the order that the IPCC presented these three models in, because they put business as usual at the end. Everybody's reaction was that the other two models are impossible, so we're doomed. I wanted to highlight the fact that if we do nothing, we lose as much as if we do something. We might choose to be doomed, but it's in no way inevitable. We can choose to live instead.

So, what ties silphium, white sage, and climate change together? No, it's not that humans are innately evil. If nothing else, fossils demonstrate that anatomically modern humans have been around for 300,000 years or more, burning the entire time. It's only in the last 2,000 years that "we" (mostly Rome and cultures that look back to it) have gotten into making things extinct for pleasure. With the Romans, it wasn't just silphium, it was European lions and North African elephants, slaughtered in the Roman arenas for sport. Be that as it may, there's a cultural component here, one that comes from ancient Rome. It's the idea that we're consumers, flames that exist only to grow, consume everything we can, and gutter out when we can't find new fuel.

Our consumer culture becomes more burdensome when the IPCC talks about the need and probable inevitability of our economy, signified by our gross national product, shrinking, either mindfully to deal with climate change, or chaotically if we don't deal with climate change. How will we keep consuming?

Does It have to be this way? Oh, hell no. As I noted above, humans do many things with fire. We don't have to be the culture of the all-consuming flame. Let's go back to white sage again.

One problem with the Saging the World campaign is that it gets people focused only on burning sage. White sage is quite useful as a living plant. It's right there in the name *Salvia apiana*. That specific epithet (botany lesson: that's the second word in the name) refers to bees, because bees love white sage. You can buy sage honey. If you keep honeybees, keep a field of white sage for them to be happy in, give away their honey to your "real friends" and find out how many friends you have. Or keep it for the native pollinators. You can burn some too, but if one dry leaf is enough to smudge your house (trust me, it is), how much do you really need to burn?

Moving out a step, we tend to feel that our "Roman inheritance" is the essential part of our civilization. In doing so, we forget that we inherit quite a lot from the Native Americans, too. As Gary Nabhan has written in several books, he's had quite a lot of luck finding rare plants growing where native people planted them, not out in "the wild" where humans don't go. Nurturing natives is part of our heritage, too, if we choose to recognize it. We can, and do, care for and grow native plants. We could even further embrace our Mediterranean and native American heritages and figure out better ways to work with fire on the landscape, as everyone's ancestors did once.

Moving outward to the IPCC, yes, Gross Domestic Product will shrink, mindfully or otherwise. So what? We have to realize that growing our GDP statistic has become a game that's no longer worth playing. It's never been an immutable reality, nor has it ever kept everyone fed, watered, clothed, housed, or happy. In the process of growing our economy, we've done things like waste 95% of the old growth redwood forest. And they were wasted—most of the wood from those ancient trees is trash and GHGs. Was it worth it, wasting so much for so little?

Maybe, as part of our process for dealing with climate change, we need to embrace different games, like measuring Gross National Happiness instead of GDP. While I'm out of space to explain what GNH is (Wikipedia is your friend), if we figure out how to meet people's needs, end extinctions, and live happily while doing so, why does it matter if our GDP statistic decreases? After all, we may need fire to be human, but we can do very much more with it than burn everything.

~ Frank Landis, Conservation Chair

IN THE FIELD

Viejas Mtn. *Acanthomintha ilicifolia*Search in May 2021 By Tom Oberbauer

Back when I was a student at San Diego State University working on my Bachelors and then Masters degrees in science, I spent a lot of time at the library. Keep in mind that the internet was not even a glimmer in anyone's eye at that time. If the document you were searching for was not in the library, you had to search down some other library and ask for a loan or visit that library. The journals and other periodicals and books were the only sources for information that were readily available. However, keeping one's nose to the grindstone could not be done all the

time, so occasionally, I would explore books to find photographs of birds and plants. magnificent set of books was the McGraw Hill set of the Wildflowers of the United States edited by H. W. Rickett of the New York Botanical Garden. It broke up the United States into areas, and had multiple volumes for each area with spectacular photographs and text. San Diego County was included in the three volume Southwestern States which included Southern California, southern Nevada, and Arizona and New Mexico. I had already acquired a copy of the initial Inventory of the Rare and Endangered Plants of California by CNPS and was interested in finding rare plants. However, when examining part three of the volume on the Southwestern States, I came across

a photo of Acanthomintha ilicifolia (San Diego thornmint) on page 545. For some reason, after seeing that photo, I became obsessed with finding that plant. I researched the address and wrote a letter to the photographer of the *Acanthomintha* photo that was in the book and she indicated that it was found in the area east of Chula Vista, which I thought at the time must be covered with houses. I reviewed over and over the text in Ethyl Bailey Higgins' annotated checklist of plants of San Diego County so that I thought I had an idea of the habitats it preferred. I spent days hiking around the upper edges of canyons in Del Cerro and nearby areas searching for it, to no avail. I hiked around the slopes on Poser Mountain east of Alpine searching for it, and finally, as an unfunded and frugal student, I published a note in the CNPS-SD newsletter that I would pay a reward for anyone who found it and would let me know where I could see it. Unfortunately, that effort was unsuccessful as well.

However, I grew up in the area east of El Cajon called Singing Hills. McGinty Mountain was a major peak in the view from my grandmother's house and I spent many mornings riding my bicycle down to Singing Hills Golf Course and hiking up the mountain to explore. McGinty Mountain is a treasure trove of rare plants with *Nolina interrata* (Dehesa beargrass), *Clinopodium chandleri* (San Miguel savory), *Tetracoccus dioicus*

(Parry's tetracoccus), and *Monardella hypoleuca* ssp. *lanata* (Felt leaf monardella) as a few. On top of the mountain is a large trench where feldspar was mined for making ceramic material. As I was exploring the upper ridge area of the trench on a day in May, I stumbled across a small patch of *Acanthomintha* plants that were nearing the end of their flowering season. Later, I found it farther down on the mountain in a clay lens that traversed the mid mountain trail. There is something about it's small, purple and white flowers and the strange odor that it generates that is like a cross between the scent of a smashed Argentine ant, and mint, that makes it of special interest to me.

Since then, Acanthomintha ilicifolia has been found at a number of locations in San Diego County and I have seen it numerous places, including in northern Baja California, in locations where it may no longer exist, and an enormous population near Slaughterhouse Canyon in Lakeside. I still think it is a fascinating

plant and I go and observe it whenever possible.

Acanthomintha ilicifolia is an ephemeral plant in the mint family. It grows generally less than a foot tall but some plants in favorable locations during favorable seasons may grow even taller. The leaves, when germinating, are distinctive with reddish coloration on otherwise green, semi-serrate, and deeply veined. At the other end of its growth cycle, it dries with a very characteristic

skeleton. It has rounded bracts below the inflorescences that have pointed spines protruding around their edges.

The stems dry to a straw color and the bracts remain in a bleached straw color as well, creating a mini forest of bract-clustered stems. In addition, the plants maintain the unique odor that can be released if the bracts are pressed between one's fingers while avoiding being stuck with the thorns. However, the old skeletons decay rather quickly during the subsequent rainfall season.



Acanthomintha ilicifolia dried plant with spiny bracts. Photo: Calscape

Acanthomintha ilicifolia has generally been found on clay soils, mostly on hillsides and mesas, especially in Baja California, and in one location, near vernal pools. It is highly sensitive to rainfall levels and in some seasons, its numbers are very low due to low and irregular precipitation. It is listed as an endangered species by the Federal U. S. Fish and Wildlife Service since 1998 and the California Department of Fish and Wildlife since 1982.

I have often looked at the slopes of Viejas Mountain from afar, and from driving past on Interstate 8. I wondered about the large grassy patches that appear almost to be tilted terraces with a uniform flattened surface that slopes upward, and

Acanthomintha ilicifolia.

Photo: Calflora.

thought that they must be great locations for *Acanthomintha*. I have hiked up the trail Viejas Mountain, but it generally passes up the slopes away from the terraces that I saw from the freeway.

In the late spring of 2020, I participated in surveys financed by the San Diego Association of Governments (SANDAG), for monitoring of *Acanthomintha* on the lower slopes of Poser Mountain. These surveys are part of the regional programs to monitor and manage the rare and endangered species of plants



Climbing the slope.
Photo: Diana Brand Ramirez

and animals in San Diego County. The 2020 rainfall season was favorable for San Diego County and we found good numbers of them in flower. It turns out that the area of Poser Mountain that I explored decades ago was too high

on the mountain. The good patches were down below Viejas Grade rather than above it which is where I had explored it.

Another location that needed to be surveyed in 2021 was the very slopes on Viejas Mountain that I wondered about for many years. I did not expect that it would be very fruitful because the 2021 rainfall season was disappointing, but the rain that did fall came at times advantageous for the plants, so one never knows what will be found until the area is examined in person.

I was scheduled to meet Diana Brand Ramirez from AECOM and Lauren Quon from the Cleveland National Forest by the Viejas Casino and then we drove to the end of Fazio Road. An old vehicle trail goes north from there, but it is very rutted and suitable only for walking.

We immediately started out in Chamise chaparral dominated by Adenostoma fasciculatum (Chamise), walking along the top of a low ridge with a moderately deep canyon to the east. The canyon had full on Riparian Oak Woodland with Quercus agrifolia (Coast live oak), Platanus racemosa (California sycamore), and a few Quercus engelmannii (Engelmann oak). Since this was the lower slope of Viejas Mountain, the soil was derived from gabbro, a black granitic rock, that contains a high level of magnesium and iron, and weathers into clay in favorable sites. Gabbro supports many rare species of plants, but the clay soil is the part that fits our survey areas.

Gabbro has a tendency to affect shrubby plant growth so that it has spaces between the shrubs, making it easier to walk through it to a degree, and in this location, open areas along the trail also supported the typical chaparral transition and dry chaparral associates such as *Eriogonum fasciculatum* (California buckwheat), *Salvia apiana* (White sage), *Baccharis sarothroides* (Chaparral broom or Broom baccharis), *Eriophyllum*

confertiflorum (Yellow yarrow) and Hazardia squarrosus (Sawtooth goldenbush). Other plants included Stylocline gnaphaloides (Everlasting nest-straw), a low growing, fuzzy leaved plant, and the bright yellow flowered Deinandra fasciculata (Fascicled tarplant), though low in number in this dry year. In previous seasons, the area has also been home to Acanthomintha ilicifolia, but we did not find any there.

However, our main goal was to get ourselves up on top of the high slope five hundred feet higher to our east to gain access to the large grassy areas. We were searching for any sign of a trail that headed up that way. Somehow, we convinced ourselves that a faint trail that broke off to the east was an appropriate route to take because the slope above was not as steep as other potential routes appeared to be. We dropped down into the canyon to the east and scrambled under large Heteromeles arbutifolia (Toyon), Quercus berberidifolia (Scrub oak), Ceanothus leucodermis (Chaparral whitethorn) shrubs, Xylococcus bicolor (Mission manzanita) and Rhus ovata (Sugarbush), crossing the drainage and pulling ourselves up the other side, grabbing shrubs and stepping carefully to keep from falling back down into the ravine. We attempted to find a way that followed shallow ridges rather than cutting up the steeper, more heavily vegetated slopes, but we ended up climbing through the heavy parts anyway.

I should mention that we wear protective gear when out in the field; long pants, snake guards, hiking boots, long sleeve shirts and gloves. The gloves help protect your hands from getting ripped up when grabbing for branches and when needing to crab crawl up a slope that is too steep to walk. I have been a firm believer in wearing snake guards for many years particularly while performing cross country surveys due to encountering rattlesnakes so many times as they buzz beneath rocks and shrubs or pass nearby. This was further emphasized a couple of years ago when I was walking on a narrow rabbit trail along State Route 52 near Santee. It was a cool, spring morning as I was walking quickly on the trail that had a variety of broad leaf annuals, clovers and lupines, growing over it when I stepped on something squishy. As I quickly looked back behind me, I saw a flash of the form of a snake. I wasn't sure what kind when I first glimpsed it, but I quickly stepped away and stopped, observing that it was a medium sized Crotalus viridus (Pacific rattlesnake). I was not sure if I mortally wounded it with my step. It did not strike and did not buzz. I think I stepped on the central part of its body. The really disturbing part for me was the feeling of its body rolling under my boot. It lay still for a few minutes, but then slithered away. I should consider myself lucky that it did not strike, but I came upon it faster than it could react in the morning that was warming yet still cool. I was wearing strong leather boots with the snake guards that come down over the tops, so that if it did strike, it would have hit the guards anyway.

Eventually, we were able to get up onto a more consistent climbing slope that was covered by many of the shrubs mentioned, but also *Salvia mellifera* (Black sage) in the less dense areas. The slope was very steep and the soil a bit

unstable but additional species included Brickellia californica (California brickellbush), Ceanothus perplexans (Cupped leaf ceanothus), Eriodictyon crassifolius (Felt leaved yerba santa), Salvia apiana (White sage), and Cneoridium dumosum (Coast spicebush) with its skin marking properties. However, it wasn't all medium to large sized shrubs. There were also smaller plants of interest including Porophyllum gracile (Odora) with its small, gray stems that always raise the question of whether or not its odor is offensive, Lupinus hirsutissimus (Nettle lupine) on areas with open soil, Malacothamnus fasciculatus (Bush mallow) with rounded, felty leaves, the small growing Mirabilis laevis (Wishbone bush) that has dark pink flowers growing in little mounds, Oxalis albicans (California wood sorrel), a light yellow flowered native oxalis, and Galium angustifolium (Narrow leaf bedstraw). After leaving the heavy vegetation, the climbing became much easier, just steep climbing and carefully watching one's step. A trip would mean bouncing downhill at worst and falling backward into scratchy shrubs at best.

Eventually, the slope broke and we emerged on top of the ridge and tilted plateau. A strip of chaparral still separated us from the grassy plain area and it was dominated by Chamise but including interesting species such as Trichostemma parishii (Mountain bluecurls), and a few Salvia clevelandii (Cleveland sage) that announces its presence a long distance from its actual location by its, sweet, laundry soap scent. The grassy area was about a tenth of a mile wide and a quarter of a mile long, tilted up slope. The vegetation changed significantly. While shrubs were still scattered around, the open clay slopes were covered with a diverse mix of annuals and herbaceous perennials that included Ambrosia psilostachya (Western ragweed), Deinandra fasciculata, though still not in great numbers, Eriophyllum confertiflorum, a few Lasthenia gracilis (Goldfields), Corethrogyne filaginifolia (Sand aster), a few Amsinckia menziesii (Rigid fiddleneck), Acmispon glaber (Deerweed), some small patches of Lupinus bicolor (Miniature lupine), Clarkia purpurea (Purple clarkia) in low numbers, California peony (Paeonia californica), small patches of the tiny Plantago erecta (Dot-seed plantain), Allium haematochiton (Red-skinned wild onion) which actually smells more like garlic, Chlorogalum parviflorum (Soap plant, Amole), Sisyrinchium bellum (Blue eyed grass) a few Calochortus splendens (Splendid mariposa lily), Bloomeria crocea (Common goldenstar), and Dipterostemon capitatus (Wild hyacinth) that has suffered another change in scientific name. The shrubs that crept over and appeared in scattered locations as individuals and small patches included Baccharis sarothroides, Salvia apiana, Eriogonum fasciculatum, Rhamnus crocea (Redberry), Adenostoma fasciculatum, Heteromeles arbutifolia and the Hesperoyucca whipplei (Chaparral candle).

Salvia sonomensis (Creeping sage) is also found on the terraces and upper slopes of Viejas Mountain. It is a unique salvia for several reasons. It grows along the ground and produces pretty blue flowers, but its range is particularly interesting since it is found in Central California down to Santa Barbara County and nowhere in between except one spot in the San Gabriel

Mountains at a helipad, but it is quite common in the eastern foothills of San Diego County.



Left: Salvia sonomensis (Creeping sage). Photo: Diana Brand Ramirez.

Of course, the major presence in this herbland grassland, was a group of native and non-native The native grasses. grasses included Stipa lepida (Foothill needlegrass), Melica imperfecta (Coast range melic), Aristida adscensionis (Sixweeks threeawn) and Vulpia octoflora (Slender

fescue). The non-natives included the weedy grasses that are found many locations including *Avena fatua* (Wild oat) and *Avena barbata* (Slender wild oat), *Bromus madritensis* (Red brome), *Bromus hordeaceous* (Soft chess), and the scourge, *Brachypodium distachyon* (Purple falsebrome) that has taken over clay soils and other grassy areas in the past decade or more. It is especially problematic because it likes habitat for *Acanthomintha ilicifolia*.

At this point, we began to search in earnest for *Acanthomintha*. Fortunately, we also had data on digital maps from previous seasons to serve as a basis. The thing that was amazing to me was that we began to find them. I had presumed that due to the half normal precipitation level that the numbers would be few and plants would be far between. Once we began to find them, we started seeing good numbers of them. Most were not flowering yet, but they appeared to be generally in good enough condition that they would mature into flowering plants. We did find a number of them that were in full flower and were of moderate size for Acanthomintha. As we began to scour the sloping grassy terrace, our goal is always to find new populations that have not been seen before or at least not documented previously. However, since we make manual counts and estimates based on those counts, we were finding hundreds of them in individual populations, and thousands over extended areas of subpopulations. We were pleasantly surprised that we found all of the known populations and a couple of additional ones and that there were so many of them this year.

We began our trek back down. We were farther north than the slope we had climbed, and looked for a way down while avoiding the various ravines that crossed the bottom of the slope. We figured if we went down a bit farther north than we came up, we would be able to avoid the ravines altogether. However, it was even more steep than the way we came up. We walked gingerly down slope, having to grab onto the slope

and trusting in sturdy plants for balance. The slope was a little slippery as well composed of a decomposing feldspar rich material.

The route we took passed near a cluster of *Nolina cismontana* (Chaparral beargrass), yet it was far enough away that we did not take the time to examine it. *Nolina interata* (Dehesa beargrass) is found on gabbro soils in southern San Diego County southward to near Valle de Guadalupe in Baja California. *Nolina cismontana* was described by Jim Dice for the plants that occur on gabbro soils on Viejas Mountain and along Magee Ridge, north of Pala and into Orange County and even Ventura County. Both are bushy monocots with long, strap shaped leaves and large inflorescences that shoot skyward. *Nolina interata* is glaucus gray in color and has an underground root mass while *Nolina cismontana's* root mass is above ground and is greener in appearance. Unlike *Nolina cismontana*, *Nolina parryi* has narrow leaves and prefers a desert habitat. Viejas Mountain is the southernmost location for *Nolina cismontana*.

After a long time of steep, downward steps, we were finally able to stumble our way down to the flatter land below and back to the cars. We were quite pleased that we were able to find so many of the *Acanthomintha* plants that particular year.

A Walk at Blue Sky Ecological Reserve By Jürgen Schrenk

Spring arrived in our foothills, and a walk in Poway's Blue Sky Ecological Reserve provided a good example.



Right: Caterpillar phacelia (*Pacelia cicutaria*).

Left: Chaparral yucca (*Hesperoyucca* whipplei); below: Chinese houses (*Collinsia heterophylla*).





Highlights for us were two uncommon Clarkias. Below left: canyon clarkia (*Clarkia epilobioides*) and below right: a lovely local endemic, delicate clarkia (*Clarkia delicata*).







Restoring Connections to Plants, Place & People

Dates: Oct. 20-22, 2022; workshops/field trips Oct. 18 & 19.

Location: The DoubleTree by Hilton in San Jose.

Find more info at: Conference Home - CNPS Conference or

https://conference.cnps.org/

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CNPS-SD Activities Calendar June 2022

6/1: Board Meeting via Zoom, p.3 6/10: Nursery Tour (must sign up), p.2

6/14: NGC Meeting & Presentation, via Zoom, p.1

6/21: Chapter Meeting, in-person, p.1

Check the CNPS-SD website for activities and/or events that may have been scheduled after this newsletter was completed: https://www.cnpssd.org/events

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June 2022 Newsletter

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