



CALIFORNIA NATIVE PLANT SOCIETY
San Diego Chapter Newsletter

CHAPTER MEETING

**Tuesday, March 15
Casa del Prado Room 101
Balboa Park**

**Presentation:
Without Insects, Plants
Would be Boring**

By Dr. Michael Wall

The diversity of flower shapes, colors, and sizes inspires gardeners, artists, and wedding planners around the world. Similarly, the diverse and variable chemistry of plants creates the flavors and aromas that inspire chefs and perfumers. The love-hate relationship that insects have with plants drives this diversity. Floral aroma and color attract pollinators to help plants reproduce, and the pungency of some of your favorite herbs evolved as feeding deterrents. Join our speaker, Dr. Michael Wall, to celebrate our six-legged friends and discover the ways they have shaped and have been shaped by plant diversity.

6:30 p.m. – Natives for Novices: BIRDSCAPING YOUR GARDEN - presented by Teresa Everett.

7:00 p.m. – refreshments, browsing, & socializing.

7:30 p.m. – presentation.

Chapter meetings are free and open to the public.



Dr. Michael Wall is the Curator of Entomology at the San Diego Natural History Museum. He got his undergraduate and Master's degrees in Botany before turning to "the dark side" with a PhD in Entomology. He is a "stinkbug taxonomist" by training, but is currently studying patterns of endemism and local insect biodiversity.

Native Landscaping Field Trip

Friday, March 25 to the infield at the Del Mar Racetrack; see page 5 for details. See pages 3-4 for field trips to natural areas.



See page 5 for more info.

WELCOME NEW MEMBERS!

David Allen
Lauren Kruse
Joyce Maschinski

Martin Niwinski
Patrick Sample
Justin Yee

RECEIVE YOUR NEWSLETTER ONLINE

To receive your newsletter via email, please contact us at:

enewsletter@cnpsd.org

If your email address has changed from what we have on record, please let us know.

Save the Date!
THIRD ANNUAL
TOUR DE PLANTS
Otay Valley Regional Park
Saturday, April 16,
10:00 am



For Kids, Plant Nerds, and Everybody

Afterparty: About noon we'll drive one mile to the Applebee's at 610 Palomar in Chula Vista for refreshments and camaraderie, where we will again award the beloved...Prizes of Little or No Value! You will undoubtedly win one! But if you fall in the lake, you're ineligible for a prize. So be careful out there! More details in the April newsletter.

**TECOLOTE CANYON
 NATURAL PARK**



March 6; 8 a.m. to noon. Meet at the Tecolote Nature Center on the first Sunday of the month. Wear sun protection and comfortable walking shoes; bring water. Rain at 8 a.m. cancels. Directions: exit I-5 at Seaworld/Tecolote exit. Go east (away from Mission Bay) on Tecolote, past the ball fields, along the driveway to the very end. Free and open to the public.



Matilija Poppies grow in the Tecolote Nature Center's garden.

BOARD MEETING

Wednesday, March 2, 6:30 – 9:00 p.m. 4010 Morena Blvd, Suite 100, San Diego (Thomas Guide 1248 C4). CNPS-SD Executive Board meetings are always the first Wednesday of the month, except when the 1st Wednesday falls on a holiday. Members are welcome to attend as observers. To add an issue to the agenda, please email president@cnpsd.org.

**CNPS Statewide
 Workshops 2016**

*Professional training for botanists, biologists,
 ecologists, and more*

THE 2016 SCHEDULE IS HERE!

- How to Photograph Flowering Plants Like a Pro
- Rare Plant Survey Protocols
- Measuring & Monitoring Plant Populations
- Wetland & Riparian Plant Identification
- Vegetation Rapid Assessment/Relevé
- Vegetation Mapping
- Introduction to Plant Identification (Northern CA, Southern CA, SF Bay area)

Full details and registration information for each workshop will be posted online at

www.cnps.org/workshops as it become available.

General Field Trip Information

Chapter field trips are free and generally open to the public. They are oriented to conservation, protection and enjoyment of California native plants and wildlife, and we adhere to all rules and guidelines for the lands on which we are visiting. In our arid region it is very important to be prepared for hiking on rugged and steep terrain and during wide temperature ranges and rapidly changing conditions. Participants should wear sturdy footwear and carry sufficient water, sun protection, food, clothing layers, personal first aid and other supplies you may need. If you have any questions about a particular field trip, please contact Kay at fieldtrips@cnpsd.org.



FIELD TRIPS

Enjoy Nature's Gardens!

March 5, Saturday 10 a.m. to 1 p.m. Post-fire Re-growth in Black Mountain Open Space with Restoration Volunteer Beth Mather.

CNPS invites you to come see the return of life to land that burned in May 2014. We will identify plants and discuss how to encourage the regrowth of coastal sage scrub species.

The majority of this area was degraded, with artichokes and exotic grasses, but the fire also burned a large healthy patch of coastal sage shrub. On the walk to the naturally recovering coastal sage scrub, we will see degraded land where a small planting project is ongoing, and many non-native weeds are being controlled. We will walk through unburned and burned coastal sage shrub where a few aggressive weeds is all the management that is needed.

Our leader for the day is retired research biologist Beth Mather. Beth volunteers in this area, removing exotic plants by various means, and leading volunteer planting parties. Last year at least twenty species of plants - phacelias (*Phacelia* spp.), wild cucumber (*Marah macrocarpa*), chia (*Salvia columbariae*), paintbrush (*Castilleja* sp.), and various lilies – were flowering among the shrubs that define the coastal sage scrub plant community: California sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), and flat-top buckwheat (*Eriogonum fasciculatum*).

Directions: Meet at 10 am at the Lusardi Creek Trailhead in the NE corner of Black Mountain Ranch Community Park, located at 14700 Carmel Valley Road (Black Mtn. Park Way), 32°59'21"N, 117°7'48"W. We recommend getting to the event ten minutes early in case the parking lot is full. If so, park in the Glider Port across Carmel Valley Road and walk to the trailhead.

The paths are irregular so wear hiking footwear. Have sun protection, drinking water, and a notepad or device so you can take notes. Birds may be active, so consider bringing binoculars if you have them.

March 19 Saturday, 10 a.m. to 1 p.m. - All ages are welcome! San Diego Nat'l Wildlife Refuge 'Interpretive Loop Trail' by the Historic Bridge.

Extra activity: a Smartphone Photography e-Scavenger Hunt. The U. S. Fish and Wildlife Service's staff and CNPS member and educator **Ann Wellhouse**

invite you to learn about nature's wonders in the hills south of El Cajon.

Just a quarter of a mile from Cuyamaca College, where a historic steel railroad bridge crosses the Sweetwater River, lies the northern edge of the huge San Diego National Wildlife Refuge. The refuge includes at least four different plant communities: chaparral, riparian woodland, oak woodland, and coastal sage scrub. Former ranchland in the refuge is being restored to appropriate native species, including some uncommon plants. Following cool-season rains, the plants start flowering, and caterpillars will follow. We'll look for dot-seed plantain (*Plantago erecta*), the plant that rare quino checkerspot butterfly caterpillars feed on. We'll also check on the population of San Diego ambrosia (*Ambrosia pumila*), a beautiful ground-covering rare plant that is found along the Interpretive Loop Trail.



Quino checkerspot butterfly (*Euphydryas editha quino*) on dotseed plantain (*Plantago erecta*).

Meet at 10 a.m. in Rancho San Diego Town Center by the YMCA at the Southwest corner of Jamacha Road and Campo Road (SR 94). From there we squeeze into as few cars as possible and ride to the little parking lot at the trailhead, about ¼ mile away.

Wear closed-toed shoes and bring water and snacks. The Loop walk is on level, well graded paths. Some people may want to do more exploring on the trail beyond the Loop. Boots are recommended to extend the hike where the trails get rugged.

e-Scavenger Hunt participants will use their smart phones to access a series of photos online to locate designated sites in the habitat. They will take habitat and plant photos that answer questions about those sites. Then they will post their photos to a website to produce a shared photo essay about the Loop Trail environment.

For general event information: contact **Kay Stewart** at fieldtrips@cnpsd.org. Contact **Ann Wellhouse** regarding the e-Scavenger Hunt at ann.wellhouse@gmail.com.

Saturday, March 26, 10 a.m. – Sunday, March 27, 4 p.m.

Borrego Palm Canyon Campground - Anza-Borrego Desert State Park.

San Diego County deserts received rain in January. Good news because this late rain may extend the bloom until late March when we have a weekend camp-out scheduled.

On Saturday we will visit two east/west canyons, Hellhole and Borrego Palm. It has been reported that more water is flowing this year than they have seen in recent years in these canyons.

Hiking in Hellhole Canyon in the morning we'll look for climbing milkweed (*Funastrum cynanchoides*) and the stream orchid (*Epipactis gigantea*). We'll stay in Hellhole until about noon+ and then we will drive to the nearby Visitor's Center and picnic. Check in for campsites is 2:00 p.m.

We'll camp in Borrego Palm Canyon Saturday night where we have reserved a group camp for the first 25 people who sign up. Saturday evening we will share a potluck and a campfire and have a night hike.

Sunday morning we will visit the sandy wash on the desert floor in the mouth of Henderson Canyon where Desert Verbena and Dune Primrose sometimes form massive beds. That afternoon we'll go up in elevation to Culp Valley (S22) where we hope to see desert bush mallow (*Malacothamnus aboriginum*) and the intense blue of sapphire woollystar (*Eriastrum sapphirinum*). Some of us will host a wildflower walk for the general public at Culp Valley while others explore this transitional environment where many plant surprises can be found.

Weather. The average daytime temperature in March is 80°F and the average night time temperature is 55°F. But, 90°F and windy is not unheard of. This is a rain-or-shine event.

Camp Fees. The price of the group campsite will be divided equally among the campers and will be reimbursed to the chapter treasury, which paid for the reservation. Six vehicles (no RV's) are allowed in the group camp and any vehicles over that number must pay an additional fee, which will also be shared. Parking fees for day visitors will be paid by individuals.

Carpooling. We hope you will carpool as the group camp limits the number of vehicles allowed without an extra charge. You can sign up to get a ride or offer a ride at <https://borregocampout2016.shutterfly.com>.

Directions: Allow three hours travel time from I-8/I-5 in San Diego and adjust time based on your starting point. From I-15 take SR 78 east. Follow directions to Ramona (15+ miles) and continue 15+ miles farther. Just past Dudley's Bakery turn left on SR 79. In about 12 miles turn right on County S2. In 4.5 miles turn left onto S22. Meet at 10 a.m. to hike Hellhole Canyon at the Hellhole Canyon trail head in the Hellhole Canyon parking lot before S22 joins Palm Canyon Drive.

What to bring: For Saturday or Sunday day trippers, bring lunch and water. For overnight camping, bring your own camping gear and food plus lots of water and a dish to share for the pot luck dinner. The campground has potable running water, toilets and showers plus Bar-B-Q's and picnic tables.

RSVP to Kay Stewart at fieldtrips@cnpssd.org to reserve a space if you are camping.

For more information about trip events, and to sign up for carpooling and the Saturday Munch About Potluck, **contact Ann Wellhouse at:** borregocampout@cnpssd.org.



Borrego Palm Canyon in February 2016.
Photo by Ann Wellhouse.

NATIVE GARDENING

Native Gardening Committee

March 9. Meets 2nd Wednesday of each month. Info: **Mike Gonzales** at gardening@cnpssd.org.

Native Landscaping

Field Trip

Friday, March 25, 9:00 a.m. The infield at the Del Mar Racetrack.

Leaders: **Leif Dickinson** (Turf & Landscape Superintendent at the Del Mar Thoroughbred Club) and **Greg Rubin** (California's Own Native Landscape Design).

The native landscape areas are predominantly in the infield located inside the Main Dirt Track and Turf Track. They were installed 2 years ago around the two infield ponds with excess soil from construction of the new Turf Track which was placed around the ponds to raise the existing grade and facilitate proper drainage from the infield, turf track, main track and stables. The initial plant selection around the east lake and a portion of the west lake was done by Greg Rubin. Most of the west lake was hydroseeded with a native mix while the east lake was planted with one gallon. Both lakes are irrigated with 100% reclaimed water.

Problems to overcome:

- Poor drainage in many areas with anaerobic soil
- High Na concentration of 700 ppm
- High nutrient load in the reclaimed water
- Weeds

In replacing the plants that have died over the past 2 years due to these harsh conditions, Leif has been experimenting with many new native species and cultivars to see which ones can survive. This has tripled the initial plant palette, with more trials to come. In addition to the great advice provided by Greg to increase survivorship, we are looking to other CNPS members for tips at this field trip. We are also asking if attendees would be willing to stay after the tour led by Leif to help with pulling some weeds, so if you are so inclined please bring proper attire (incl. gloves and hat) and water.

It is also important to note that these native plantings around the infield ponds dovetail nicely with the adjacent native plant pollinator garden which was installed for the SD Fair last year and is now a permanent feature of the Fair as part of the infield demonstration gardens. This exhibit and the relationships between the two projects will also be discussed at this field trip.

Directions: The infield can be accessed via a tunnel that goes under the Main and Turf Tracks. The tunnel is

located on the west end of the grandstand and goes under the main and turf tracks directly into the infield. The facility can usually be accessed via the Solana Gate, which is the most westerly gate heading west on Via De La Valle. Drive down the gate and head south along the road toward the west end of the grandstand. The tunnel is located directly in front of the west end of the grandstand. Leif will try to have signage out to direct people to the landscape area.

CNPS-SD NATIVE GARDEN TOUR “Landscaping for the Future”

April 2 and 3, 2016

This year we feature **21 native plant gardens in eastern San Diego, La Mesa, El Cajon and Jamul**. Our theme, Landscaping for the Future, looks inland to see how native gardens have adapted to the more variable weather conditions that we all can soon expect to be facing. Our featured gardens include seven different landscape designers' work as well as lots of do-it-yourself gardens. We also include three large (2-acre) “worth the drive” back-country landscapes that will be open a bit later than the rest of the tour. To purchase your tickets, visit the website at www.gardennative.org. If you would like to help or become a docent for the tour, please email Jan Keeney at docents@gardennative.org.

Garden Tales Stories of the 2016 Tour Gardens

When we bought our house typical 1960's small tract-house in 1984, our back yard consisted of lawn. When **Phil Roullard** moved in with me (**Callie Mack**) December 1984 we had the landscape you'd expect for a little suburban 60's tract house: lawn, queen palm, Nile lilies, rosebushes, and iceplant in the back, and Italian stone pines, junipers, bottlebrush, and the standard shrubs. Phil, a County Parks ranger and native Californian, had some new ideas about yard care, including losing the lawn and planting natives.

Since we did all our landscaping ourselves, our yard's transformation took many years and had its share of mistakes. Piece-by-piece, we removed the lawn, the

palm tree, and all the other exotic plants and replaced them with natives. Our first native was a Monterey pine-in-a-pot Christmas tree that we'd purchased for Phil's parents. Then we inherited a spindly little Torrey pine, rejected from the Tijuana Estuary's garden -- it's now over 30 feet tall! We switched out myporum for toyon and lemonadeberry. We planted succulents, sages, and ground-cover manzanitas.

We learned by trial and error which plants can't grow under the conditions in different parts of our yard, and started observing which species work best with our soil and weather conditions; we took note of plants that thrive in our local natural areas such as Mission Trails Park. As the gardens evolved, we added paths, rocks, arbors and some interesting "found objects".

Somewhere in the mid-90s, we became a National Wildlife Federation Backyard Habitat.

We cleared out one side yard and turned that area into a raised vegetable garden, now home to our rainwater tanks as well. The citrus trees in the other side yard are watered by our laundry rinse water.

In 2006, we won the California-Friendly Landscape Contest (held by local water districts) for Best Native Plantings. Last year we added about 1,100 gallons worth of rain tanks and our bee house; we also hired **Kay Stewart** for a consultation and implemented her ideas. After 30 years of slow but steady transformation and a lot of hard physical labor, our front and back yards are relatively maintenance-free, wildlife-friendly, low-water-use and fun!

~ Callie Mack

Old Town Native Plant Landscape Partners in Grime

Saturday, March 12: Work Party - 1 to 3 p.m. Join the Partners in Grime in Caring for Native Plants.

We hope that the oaks, sycamores, wild onion, blue-eyed grass, yarrow, white and black sage, fuchsia-flowered gooseberries, deergrass, elderberries, and wild roses will be blooming as they did last year in early March. It is always a good feeling to care for lovely natives by removing the unwanted exotic pest plants that would take water and nutrients from them! The birds, butterflies, squirrels and occasional rabbit that have found this little pocket of natural San Diego let us know that the native plants are an agreeable home for them.

The Landscape is located at the corner of Taylor and Congress streets. Park for free in the shady Cal. Dept of Transportation parking lot across Taylor from the Landscape. Bring gloves, weeding tools, sun protection, and drinking water. If it is raining, some of us will be there, wearing our rain gear, so come if you want.

Questions? Contact Kay at fieldtrips@cnpsd.org
Questions? Contact Kay at fieldtrips@cnpsd.org.

CONSERVATION

Conservation Committee

March 1. First Tuesday evening of each month. Contact **Frank Landis** at raresurvey@cnpsd.org for the location.

The Newhall Ranch Decision Backlash

As you may remember, back in January, I devoted a column to the decision in Center for Biological Diversity et al. v. California Department of Fish and Wildlife and Newhall Land and Farming Company, the Newhall Ranch ruling. (Un)fortunately for the environmental community, the development community was paying close attention as well. As you might expect, there's a backlash. Actually, there are two backlashes. While you may not be active in conservation, if you happen to vote in California, one of these backlashes will affect you in every election.

If you don't have access to your January newsletter, the basic point of the Newhall Ranch ruling was to disqualify a certain category of analyzing greenhouse gas (GHG) impacts in environmental impact reports (EIRs). The "problem" for everyone is that the California Supreme Court didn't say definitively what would pass muster, although they strongly hinted that having a project consistent with the local Climate Action Plan would be a very good thing indeed.

Some developers got that message. Some did not. So far, they've come up with two separate responses.

One rumored response is that developers are giving up on big projects that trigger EIRs. Instead, they're going to do smaller projects closer to towns. They're trying to present these developments so that they only need a mitigated negative declaration (MND), a CEQA document that's less than a full EIR. Of course, for years they've been trying to sneak camel-sized projects into the pup-tent of MND coverage, so this isn't new. However, an increased volume of problematic MNDs

will turn into a serious nuisance for those of us who respond to CEQA documents. Indeed, Van Collinsworth, a local environmentalist, has sent out a string of responses to Santee MNDs (and EIRs), telling them to put on rooftop solar and analyze their GHG impacts properly. I've cosigned CNPSSD onto a number of those letters, because it's the same point we need to make: new development needs to fight climate change, not to be part of the problem.

But that's small-fry stuff. The big boys, like the developers behind Lilac Hills Ranch and the Agua Hedionda Lagoon Project, are trying to bypass CEQA altogether by starting citizens' initiatives to get their projects built.

Pay close attention, because this is where you come in as a voter.

The California Supreme Court, in its wisdom, decided in 2014 that citizen's initiatives did not have to comply with CEQA, in the Tuolumne Jobs & Small Business Alliance v. The Superior Court of Tuolumne County case. Their logic is that requiring CEQA analysis of any initiative makes it impossible for the petitioners to make the deadlines mandated by the initiative process, and anyway, CEQA wasn't mentioned in the 1911 California constitutional amendment that created the citizen's initiative process.

The bad news is that the Court believes that the voters (that's you), somehow knowing that an initiative did not go through CEQA analysis, will more carefully consider the ballot initiative and suss out the environmental problems with it, before making your thoughtful decision about whether to support it or not.

Yeah. Right. I know how much of a struggle it is to get many friends and family members to vote, let alone read the initiatives, let alone understand the environmental consequences of their vote. That's a hell of a big burden to put on the average voter. But that's what Supreme Court has decided we're fit to do, so rightly or wrongly, we've got to do it.

Here are some things that might make the decision simpler. You might:

- Vote against all initiative-based developments, no matter how good they look.
- Refuse to even sign onto any initiative that's trying to get a development on the ballot, even though a signature on an initiative isn't a vote for it.
- Most importantly, talk to your friends, relatives, colleagues, even enemies, about what you're doing and why.

There's actually a method in this rather draconian approach. The California Supreme Court did not outlaw development with the Newhall Ranch ruling. Indeed, they went out of their way to insure that growth would continue. They described three potential ways that developers could make their developments carbon impact neutral, along with anything else the developers did (like, say, actually making carbon neutral developments).

But the critical thing is project costs: as a businessman told me years ago, if a project's profits are so thin that an EIR, let alone a lawsuit over the EIR, would make the project unprofitable, they shouldn't be doing it because it was too risky.

Now think about how much money these developers are spending on the initiative process, and read that previous paragraph again. What are the developers doing to their profits by pursuing an initiative instead of CEQA? I don't know for sure, but from what I've heard, the initiative process, with all that advertising, is far more expensive than just doing an EIR.

I'd suggest that these developments aren't about profits, they're about politics and power. The developers have purchased some crappy locations for developments, and they're determined to build their projects regardless of profits, regardless of community needs and desires, regardless of future impacts. They figure they'll sell whatever they build, because they'll spend on advertising to make it look good. And they've decided, irrationally, to hate and fear the CEQA process, rather than to see it as just another, fairly minor, business expense.

For years, my advice to developers and other business types has been to simply follow CEQA exactly. Do the studies, commission the reports, hold the meetings. If they do that, they'll easily win all CEQA lawsuits (which are based on failure to follow CEQA rules), and it's generally cheaper to do this than to hire lawyers to defend a crappy CEQA document. And going through CEQA shouldn't kill their profits either. A number of developers know this already, but they're not the ones pushing the initiatives.

So that's why I'd suggest categorically voting down development by initiative. The people pushing them are likely wasting their money by avoiding the CEQA process, and/or they are trying to push a project that is in such a bad location that they never should have bought the land in the first place. In either case, we don't need to reward bad business decisions by letting them win in the ballot box.

Hopefully this is an argument that people of all political backgrounds can get behind. If you agree with my analysis, I'd like you to help me spread this message to all the voters you know. Thanks in advance.

~ Frank Landis, Conservation Chair

BOTANY

Otay Mountain



Hesperocyperis forbesii (Tecate cypress) on Otay Mountain.
Photo by Tom Oberbauer.

Jonathan Dunn, Margie Mulligan and I (Tom Oberbauer) drove out to Otay Mountain on a cool morning in mid spring. Our goal while working for AECOM and funded by SANDAG was to find a number of rare plants that are not well known in San Diego County so that they could be monitored and managed. We drove across Otay Mesa and turned up the hill past the gate north of the power plant. The pathway traveled over a very rough, steep stretch to connect with the main Otay Mountain truck trail. We were riding in Jonathan's personal vehicle, a 1990s era Toyota T-100 pickup truck with 4-wheel drive and a very high number of miles. The vehicle rattled and bumped a bit as it bounced and lunged over the gravel and rock moguls worn by years of use by Border Patrol trucks. We then took the side road that turned northward into the deep canyon that trends east and west, on the north side of the main western ridge. I have been on that road a couple of times before, in efforts to get as far back into the area as possible. However, the eastern part is suited only for quad runners. We stopped where the road crosses the major drainage and looked around on the north facing slope south of the road. A few *Hesperocyperis forbesii* (Tecate cypress) grow there in the bottom of the drainage. It was an overcast day with stratus clouds

layered at about 7,000 feet, not setting down on the top of the 3,500 foot Otay Mountain itself.

The goal was to find the total distribution of several species of rare plants. *Lepechinia ganderi* (Gander's pitcher sage), *Baccharis vanessae* (Encinitas baccharis) and *Clinopodium chandleri* (San Miguel savory) were the main ones to look for here. We walked up the north facing slope in the midst of *Ceanothus tomentosus* (woolly leaf ceanothus) and *Adenostoma fasciculatum* (chamise). *Delphinium parryi* (San Bernardino larkspur) plants were in bloom, growing in clusters with blue flowers in the drying grass. The taller *Delphinium cardinale* (red larkspur) was also in flower. We looked around the area further but did not find any of the really rare plants. I walked up the trail to the east, up the canyon quite a way, but did not find any of the rare plants there either. We then drove back to the main road and continued east on the high ridge. Beginning at our first stop in the chaparral on the main ridge, we became truly entranced. At nearly every stop we made, we found the *Lepechinia ganderi*.



Lepechinia ganderi (Gander's pitcher sage) at Otay Mountain. Photo by Tom Oberbauer.

The *Lepechinia ganderi* is an interesting plant. Members of the genus are referred to as pitcher sage. The plant is a shrub with large acute triangular shaped leaves with a characteristic inflorescence of a raceme of dark colored stems with an inch or more long white pitcher shaped flowers that have a long lower lip to form the shape of a water pitcher. When in full flower the plant is quite beautiful but usually flowering seems to be sporadic with only a few flowers on any inflorescence at one time. One of the key characteristics of the species is the shape of the calyx. Each lobe of the calyx has long, spindly finger-like tips. The plant leaves are a dark, dusty green color with fine wrinkles but as the summer progresses, the leaves and stems turn dark brown. Another characteristic of the plant is the odor of the stems or leaves when crushed. Since it is in the mint family, the odor is strong, a mix of minty Vicks-VapoRub combined with the odor of a musty warehouse or an old man's garage. One does not forget it. Other members of the genus have more

pleasant odors including *Lepechinia fragrans* (Wallace's pitcher plant) that is found from the Santa Monica and San Gabriel mountains, to Ventura county. Several of the species are considered sensitive on the CNPS plant list including *Lepechinia cardiophylla* (heart leaved pitcher sage) which occurs in central San Diego County, *Lepechinia fragrans*, and *Lepechinia rossii* (Ross' pitcher sage) that was only described in 2006 from four locations in the mountains north of Los Angeles.

We also walked out into the chaparral on top of the mountain and north ridge, and observed here that the chaparral is different. It is dominated by *Chamaebatia australis* (southern mountain misery), *Adenostoma fasciculatum*, *Arctostaphylos otayensis*, *Ceanothus otayensis* and Tecate cypress. In addition to the Tecate cypress, one of the main unique species that defines the vegetation is the fern-leaved *Chamaebatia australis*. The leaves are bright green when in winter and spring, producing a color on the slopes that indicates the fresh seasonal growth. The flowers are small white rose like flowers, several centimeters in diameter with yellow stamen covered centers. *Chamaebatia* also has a characteristic scent like that of a greasy turpentine mint combination. The leaves are permeated with it and are covered with its scented sticky residue. Furthermore, one washing of the clothes that have been worn in the field while walking through *Chamaebatia* will not remove the odor and if they are washed with other clothes, the scent will be spread to those other clothes as well. I know this from experience.

Chamaebatia australis (southern mountain misery).
Photo from Wikipedia.



There is another species of *Chamaebatia* that may be more familiar with most people, *Chamaebatia foliolosa* (Sierran mountain misery) from the Sierra Nevada and Cascade Ranges and *Chamaebatiaria millefolium* (Desert sweet), a somewhat similar species from Pinyon Juniper Woodlands. We examined a number of the off-side roads, finding *Lepechinia* where we went but not *Clinopodium* (formerly *Satureja*) nor *Baccharis vanassae*. The really interesting thing about *Clinopodium* is that it has for years been included on lists of plants for Otay Mountain, but no collections

existed in the consortium of plant collections maintained by UC Berkeley.

From the high ridge, one could see far down into Mexico and the peaks of Cerro Jesus Maria close to the south and Cerro Gordo and Cerro Bola in the distance. *Calochortus dunnii* (Dunn's mariposa lily) was growing and flowering along the ridge line. Its white lily/tulip shaped flowers on their stems appear to float above the surface. The interior of the flower has brownish markings near the base of the three petals, lower in the flowers.



Calochortus dunnii
(Dunn's mariposa lily) at
Otay Mountain. Photo by
Tom Oberbauer.

We drove east up the side road near the top where Naomi Fraga had collected *Baccharis vanessae* a number of years ago on a northeast facing slope. That is one of the steepest roads around, requiring 4-wheel drive on a surface of decomposed granite, a side route originally constructed for the Border Patrol. The road is on a narrow ridge with extremely steep slopes down the east and west sides. After a brief examination, the *Baccharis* was found and we found *Clinopodium* that was mentioned by Naomi as being present near there, but not collected. We searched the area down the length of the road and down the slopes. We found a few more *Baccharis*, mostly as individuals, but no more *Clinopodium*. The *Clinopodium* we found was just past flowering. Its sweet mint odor was striking when the leaves were touched. At that point, we turned around and drove back up onto the mountain to the west.

The Tecate cypress was making good progress recovering from the fires of 2003 and 2007, but some of them near the road had turned brown from the prolonged drought as well as dust coverage from fine soil powder that is stirred up by passing vehicles. However, they were making good growth overall.

We intended to come back and look at the remainder of the ridge area the following day.

The next morning, while we headed east on the ridge, we decided to look down the canyon on the road that turns south toward the border. The road drops very steeply down the slope into the canyon, turning east where it approached the border. On the way down,

Lepechinia was visible all the way to the bottom near the border on the east facing slopes. *Quercus cedrosensis* (Cedros island oak) was also growing there. *Quercus cedrosensis* is a moderately sized shrub with dark green leaves that have smooth edges. The type locality, the first place it was described, is Cedros Island far to the south in Central Baja California. It was also found near Presa Rodriguez in northern Baja California around 7 miles south of the border; however, the location here was not discovered until the mid-1990s.

Once we were down to the bottom of the canyon on the southern border, we looked around for other plants. The border road was created a few years ago, along with a major fence of rust coated poles placed a few inches apart. The fence meanders over the hills along the border like one of Cristo's pieces of temporary art work, though this one is permanent.

Back in 2003, I walked with a group of people along a dirt equestrian trail that the Border Patrol used. It is very different now with a well maintained and graded road on the southern border of a Federal Wilderness area. It does provide access to difficult to reach locations. We stopped a number of times to look for *Lepechinia* and we found it in a number of locations including almost directly on the border at one stop. Chaparral extends down in some locations but most of the south slope is covered with a form of Coastal sage scrub with *Bahiopsis laciniata* (San Diego sunflower) one of the dominants, but also *Salvia munzii* (Munz's sage), and *Artemisia californica* (California sagebrush). The slopes have been burned multiple times over parts of the route.

The road rose and fell with small switchbacks on steep slopes. As it moved east, it rose and overlooked parts of the Tijuana River Valley in a truly rural setting. The green, lush riparian habitat curved and bent along the valley bottom and dark colored chaparral-covered mountains stood in the distance. The grassy open valley had rows of green, yellow and gold traversed by the green riparian zone that created a picturesque scene of depth and visual serenity in the often burned Marron Valley.

We stopped a few times and then drove up one of the roads at the canyon bottom that leads to the eastern ridge of Otay Mountain. From there, we drove back to the west, up through the slowly recovering cypress forest that burned in 1978 and again in 2003 and parts in 2007. The trees are growing but they will never again attain the density and height that they held in 1979, before the first big fires. Repeated fires have

taken a toll and some areas that now support blackened skeletons but not young trees will no longer grow back to a forest. The majority of the forest on the mountain will recover if no new fires occur for a long time, but there are significant areas where the forest has been permanently lost.

As we traveled west up the east side ridge, we also saw *Hosackia crassifolius* var. *otayensis*, the near endemic Lotus. This one is an herbaceous perennial with new growth each year from a perennial base. *Acmispon grandiflorus* (large leaved lotus) is also common on the mountain, but this one is different with a more upward life growth and flowers that are cream and purple rather than red and yellow of the *A. grandiflorus*. This time, the *Hosackia crassifolia* var. *otayensis* was past flowering but fruit had set.

One thing is for sure, when one drives around on Otay Mountain, you will encounter Border Patrol. If you are off on the side roads, 4X4 driving, you will be approached by men in green on quad runners with hockey style helmets. If you are on the main road, it will be in a white Chevrolet Tahoe 4X4 trail certified with off road bumpers and racing gear. They simply want to know what you are doing and if you set off their sensors. They also remind one of the dangers from rattlesnakes, border bandits and too much sun. As some have said, while it is somewhat reassuring that they are there, they do sometimes drive fast and one has to be attentive to potential encounters with their vehicle on blind curves. Circular mirrors have been mounted at angles so that oncoming vehicles in a blind spot may be visible.

We were only able to observe the main ridge line and some of the slopes on the southern part of the mountain. However, there are other access points to the north that could be explored later in the quest for rare plants. Back in 2014, I created a map of Tecate cypress distribution and did drive a number of roads and access routes on the north side of the mountain but I did not have time to really examine the areas for other rare plants. One really spectacular plant that I have observed down deep in the north side canyons is *Fremontodendron mexicanum* (Mexican flannelbush) with its large yellow and orange flowers and broad, felty leaves.

With its high number of rare plant species and fascinating Tecate Cypress forest in various states of recovery, Otay Mountain is truly one of the unique areas in San Diego County.

~ **Thomas Oberbauer**, Vice President

RELATED ACTIVITIES

Anza-Borrego Desert State Park Botany Society

March 14, 10 a.m., Anza-Borrego Desert State Park Visitor Center, 200 Palm Canyon Drive 92004. The public is invited; **free**. **Daniel E. Winkler** will speak on “**Desert Extremes and Plant Communities out of Balance.**” Daniel is Ph.D. student at the UCI Desert Research Station and a National Park Service (NPS) Young Leader in Climate Change at Saguaro National Park. He worked for several years throughout the Sonoran Desert as a Biological Science Technician for the NPS’s Sonoran Desert Network before returning to school to get his Master’s in Environmental Systems from the UC Merced. Most of his current PhD work brings him to Anza-Borrego Desert State Park where he is investigating the spread of the invasive Sahara mustard across the southwestern U.S. Daniel is a plant ecophysiologicalist interested in invasive species and how they alter native plant communities in “extreme” environments. His field sites include much of the desert southwest, alpine regions of Colorado, the sky islands of Baja California, and the tundra of northern Japan. All of Daniel’s research focuses on climate change impacts on native systems, with an emphasis on Parks and protected areas.

POINT LOMA NATIVE PLANT GARDEN

March 5 & 20, 9 – noon. Work Party. Usually 1st Saturday and 3rd Sunday of each month. Contact: Richard@sandiegoriver.org for more info.

SDNHM

Thursday, March 24, 7 p.m. Charmaine and Maurice Kaplan Theater at the San Diego Natural History Museum. Joseph Wilson, Ph.D., author of *The Bees in Your Backyard: A Guide to North America's Bees*, aims to dispel the common myths of bees. Wilson will provide engaging accounts of the bees encountered in North America, with clues for telling these stunning creatures apart. A book signing will follow (books will be available in the Museum store).

WILDFLOWER HOTLINES

Anza-Borrego Desert State Park: (760) 767-4684.

Info, events, road conditions, etc.: (760) 767-5311 or

www.desertusa.com/wildflo/wildupdates.html.

Anza-Borrego Desert State Park:

<http://www.abdnha.org/pages/03flora/reports/current.htm>. You can add your observations at this website.

<http://theodorepayne.org/education/wildflower-hotline/>



Desert five-spot
(*Eremalche rotundifolia*).

ERIOGONUM SOCIETY

SAVE THE DATE: The annual meeting with field trips will be **Friday Sept. 16 to Monday, Sept. 19, 2016**, at the Desert Research Center near Baker, California. The society’s website is <http://www.eriogonum.org/>; however, detailed info for the annual meeting is not yet available.

The CNPS-SD Newsletter is generally published 12 times a year. The newsletter is not peer reviewed and any opinions expressed are those of the author identified at the end of each notice or article. The newsletter editor may edit the submittal to improve accuracy, improve readability, shorten articles to fit the space, and reduce the potential for legal challenges against CNPS. If an article, as edited, is not satisfactory to the author, the author can appeal to the board. The author has the final say on whether the article, as edited, is printed in the newsletter. Submissions are due by the 10th of the month preceding the newsletter; that is, October 10 for the November newsletter, etc. Please submit items to newsletter@cnpsd.org

CNPS-SD Activities Calendar March 2016

- 3/1: Conservation Committee Mtg, p.6
- 3/2: **Board Meeting**, p.2
- 3/5: Field Trip – Black Mountain Open Space, p.3
- 3/6: Tecolote Cyn field trip, p. 2
- 3/9: Gardening Committee Mtg, p. 4
- 3/12: Old Town Native Landscape, p.6
- 3/15: **Chapter Meeting**, p. 1
- 3/19: Field Trip – SD Nat’l Wildlife Refuge, p.3
- 3/25: Field Trip – Infield at Del Mar Racetrack, p.5
- 3/26-27 Borrego Palm Canyon Campout, p.4
- 4/2-3 Native Garden Tour, p.5

MEMBERSHIP APPLICATION

___ Student or Limited Income \$25; ___ Individual \$45; ___ Family \$75
___ Plant Lover \$100; ___ Patron \$300; ___ Benefactor \$600; ___ Mariposa Lily \$1,500
Name(s): _____
Address: _____
Phone: _____ e-mail: _____

Mail check payable to "CNPS" and send to: CNPS, 2707 K Street, Ste 1, Sacramento, CA 95816-5113.

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March 2016 Newsletter

Dedicated to the preservation of the California native flora

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