

CALIFORNIA NATIVE PLANT SOCIETY San Diego Chapter Newsletter

CHAPTER MEETING

Tuesday, March 21 asa del Prado Room 10

Casa del Prado Room 101 Balboa Park

Regional Rare Plant Monitoring and Management in San Diego County by Kristine Preston

The San Diego Management and Monitoring Program (SDMMP) coordinates regional monitoring and management of 111 species of which 57 are plants on Conserved Lands in San Diego County! This coordination is carried out in collaboration with land managers, wildlife agencies, conservation groups, environmental consulting firms, and other partners.

The SDMMP prepared a Management and Monitoring Strategic Plan for Conserved Lands in Western San Diego County (MSP Roadmap) that provides regional goals and management and monitoring objectives for species, vegetation communities, and threats. An important rare plant monitoring objective uses an "Inspect and Manage" standardized protocol to document population status and assess habitat and threats. This monitoring is conducted by land managers, contracted biologists, and volunteers. The results allow tracking of species populations over time in relation to environmental conditions, and determining annual management needs. Many rare plant species have objectives to prepare seed collection, banking/bulking plans and management plans to improve probability of population persistence over the long-term. Other objectives include genetic studies guide management plans, developing management practices, and conducting research to address information gaps critical to implementing effective management.

Kristine Preston provides science support to the SDMMP. She started as an ornithologist in southern California in the late-1980s, expanded to become a community ecologist, and more recently has focused on rare plants. She received a BS in Wildlife and Fisheries Biology from UC Davis and PhD in Biology from UC Riverside.

6:30-7:00 pm – Natives for Novices. Topic TBD.

7:00 pm – refreshments, browsing, & socializing.

7:30 pm – presentation.

Chapter meetings are free and open to the public.

FIELD TRIPS

Anza-Borrego Plum Canyon Sunday, March 19, 2017; 10 am-3 pm

On this field trip with the San Diego Canyoneers we'll experience lower elevation desert vegetation on this walk along an abandoned wagon road, once a major route into this section of Anza-Borrego. It is now a peaceful canyon filled with many native desert plants, including flowering annuals, shrubs and cacti, and animals. This is an intermediate 6 mile hike with an elevation gain/loss of up to 1,500 feet.

Directions: Take CA-78/79 to Julian and turn right on CA-78 E (Main St.) and go 15.7 miles. Meet the Canyoneer host at the Plum Canyon turnout on the right side of the road. If you reach Tamarisk Grove (Yaqui Pass Rd.) you have gone 2.7 miles too far. At the turnout we will consolidate into 4WD or high-clearance vehicles to reach the trailhead. No facilities. (GPS N33.128676, W116.425221)

Ride share: If you want to ride-share from coastal central San Diego, meet at 7:45 am at the parking lot behind Denny's Restaurant, 7676 Friar's Road, just east of SR 163. Enter the parking lot from cross street Frazee Road. We will leave from there at 8:00 am. Be sure and

offer whoever is driving several dollars for transportation costs.





Desert apricot (*Prunus fremontii*) and Bigelow's monkeyflower (*Mimulus bigelovii*) in Plum Canyon on a previous CNPS-SD field trip. Photos by B. Stephenson.

BOARD MEETING

Wednesday, March 1, 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@cnpssd.org.

WELCOME NEW MEMBERS!

Oksana Polesskaya Sabine Prather Abril Ruiz Andrea Steinbergs
Sandra Wetzel-Smith
The Leichtag Foundation

NATIVE GARDENING

Garden Native Meeting

March 8. Garden Native is the Chapter's native gardening committee, which meets the 2nd Wednesday of each month at various locations. For info: **Mike Gonzales** at gardening@cnpssd.org.

Q & A's

CNPS-SD recently received a query from a San Diego County gardener:

Q: "I bought a manzanita at your plant sale and I am about to plant it in the ground. Before I do, is there any recommended soil amendment or fertilizer that I should use? What type of fertilizer should I use after planting, and how often?"

A: In general, native plants do not need or want much in

terms of fertilizers or soil amendments. They are adapted to living in rather nutrient-poor soils. The nutrients they do receive usually come from their own leaf litter. Manzanitas in particular hate fertilizers. A good analogy is that fertilizing native plants is like trying to feed a milk shake to a hummingbird. You should resist the temptation to add any fertilizer when you plant it or at any time afterwards. If you would like to read more about this, the Las Pilitas Nursery web site has a good discussion of manzanitas:

http://www.laspilitas.com/groups/manzanita_arctostaphylos/Manzanita.html.

Q: "I have a question about cutting back California Fuchsia, Salvia 'Pozo Blue' and California Encelia. I have cut back the Fuchsia previously but was too cautious and now it is getting an unattractive woody base. I would like to deadhead the Salvia – when can I do that? I have cut back the Encelia before and it seemed to come back readily. Can I do this every year?

A: You can deadhead Salvias any time from later summer to mid-winter, and you can prune them to the desired shape at the same time. If you want to feed the birds in your garden, scatter the cut seed heads on the ground, or you could put them in a bowl or something similar to make a feeding station. Birds such as finches and towhees love the seeds of Salvias. As you saw with your coast sunflower (Encelia californica), most natives come back vigorously from pruning when they get some winter rain. You can cut back the Encelia every year if you wish. Your California fuchsia should be cut back to the ground in winter and it will pop back next spring. Don't cut it too early as it flowers from summer through fall. It spreads by underground runners as well as seeds, so you may find it popping up in other parts of your yard. If you find it getting out of control, you can pull up the young shoots, roots and all, to keep it contained.

Q: "I have heard about a 'good fungus' that lives in the soil and helps plants be more drought tolerant. What is this and how can I get it for my garden?"

A: What you heard about is *mycorrhizal fungi*. These fungi do indeed live in the soil and form a mutually beneficial association with certain plants. The extremely fine root-like hairs of the fungus can extract water from the soil better than the roots of green plants. However, the fungus lacks chlorophyll and cannot make its own food. In a classic example of symbiosis, mycorrhizal fungi provide water to green plants, and in return the green plants supply carbohydrates to the fungi. The best way to encourage mycorrhizal fungi in your garden is to follow this program:

- Have a good variety of native plants
- Use a combination of rocks and good quality mulch around your plants
- Avoid herbicides but keep non-native weeds under control as much as possible
- Avoid fertilizers
- Avoid unnecessary soil disturbance
- Keep soil relatively dry in summer. Lightly water no more than once or twice a month.

Q & A is a regular column of the CNPS-SD newsletter. Please send your native gardening questions to info@cnpssd.org.

The Story of Bob Smith and Sondra Boddy's California Native Garden – Part Three

With over 16 inches of rain since October, everything in our California native garden is growing — including a bumper crop of weeds! Before we can sit back and enjoy the spectacular spring wildflower display, we are working on getting rid of these annoying trespassers. Handweeding is our preferred eradication method in late winter, when the ground is soft and the weeds are large enough to be pulled out from the roots. Pulling weeds might not be your idea of fun, but it is very important and there are ways to make it easier and more enjoyable. It can even be good for you. How? Read on, California Native DIY Gardeners!

Eradicating weeds is important not only because it improves the appearance of your garden, but also because it promotes the health of your garden. Nonnative or "naturalized" species are genetically programmed to compete with native species; they usually grow and bloom faster, blocking out sunlight and hogging water and nutrients. If left unchecked, weeds can damage or even kill oaks and other native flora by disrupting the fragile fungal network in the soil which allows native plants to share resources and support one another. Pulling weeds promotes good "garden hygiene," which is essential to building a vibrant California native garden.

Before you wade out into the sea of green meanies, here are some general pointers:

1. Learn to recognize weeds. A great resource is San Diego County Native Plants by James Lightner, which contains photos and descriptions of more than 1,000 native and naturalized species found in San Diego County. (cont. on p. 4)



PLEASE JOIN US AS A VOLUNTEER FOR OUR 5TH ANNUAL TOUR!



If you participate as a volunteer, you will receive one free tour ticket for a 4-hour shift and 2 free tickets for an 8-hour shift.

Volunteers will greet people who are coming to view the gardens and share an enthusiasm for using native plants in landscaping. Knowledge about native plants is not necessary to be a volunteer. Friendliness, enthusiasm and an interest in talking with others are the desired skills.

First-timers will enjoy a 2-hour volunteer training session and mini-tour (including lunch) at one of two locations/dates of their choice. Attendance at the training is optional for past garden tour volunteers.

The two dates for these training sessions are:

- Saturday, March 18th in the South Bay Area
- Sunday, March 26th in the South Park Area

You only need to attend ONE training but you are welcome to attend both. If you are unable to attend either session, please contact Judie Lincer at judielincer@gmail.com to arrange other training opportunities.

Sign up here: gardennative.org/volunteer-contact-form
Any questions? Email: judielincer@gmail.com

April 29 CNPS-SD Spring Plant Sale

at the Cuyamaca Water Conservation
Garden - Spring Garden Fest
More info in the April newsletter.

(California Native Garden - Continued from p. 3)

Many common weeds like Sow Thistle (Sonchus oleraceus), Scarlet Pimpernel (Anagallis arvensis) and Weedy Mallow (Malva parviflora) are easy to identify, but be on the look-out for sneaky interlopers like London Rocket (Sisymbrium irio), Shepherd's Purse (Capsella bursa-pastoris) and Brass Buttons (Cotula australis). Unless you are actively welcoming native volunteers into your garden, our advice is: "When in doubt, pull it out!"





Sow Thistle (Sonchus oleraceus) and Scarlet Pimpernel (Anagallis arvensis). Photos from Wikipedia.

- 2. If you sow California native wildflower seeds in the fall or winter (and we think you should!), keep track of where you sowed them by marking the area with a landscaping flag or by recording the location in a garden journal. Find a photo of what that particular wildflower looks like as a seedling. A good source is the S&S Seeds website (www.ssseeds.com). Knowing how to distinguish good from bad will help you to stay focused when you are out there making decisions about what to pull.
- 3. Pulling weeds is easier when the soil is wet, after a good rain. But the sooner you do it, the better, because weeds grow fast and you need to pull them out before they flower. Weed seeds can survive for years and germinate when conditions are right. Because of all the rain we have had this year, we are seeing weeds in our garden that we have never seen before.

Now that you are ready to tackle the job, let us give you some tips on how to make weeding easier and more enjoyable:

- Wear light garden gloves to protect your hands.
 Some weeds are prickly and others can cause skin rashes.
- 2. Stretch and shake out your body before you start. Adopt a wide stance and slowly lean forward over one bended knee as you reach and pull the weeds that are within arms-length distance. Go easy. Avoid sudden movements and don't strain yourself. If bending from the waist bothers your back, try bending both knees and crouching down or kneeling. If you get tired, sit on the ground or stand up and stroll around. Take a break, then get back to work.

- 3. Weeds with wide, flat leaves and round fleshy stems often break off when you try to pull them out. For these types of weeds, we recommend using a weeding tool. It has a long handle with a forked prong at the end. Position it vertically on top of the weed and plunge down as far as you can into the soil. Wiggle the tool back and forth, make a small circular motion to loosen the roots, then reach down and gently pull the weed out. If it breaks off, take heart. It might never grow back, and at least you slowed it down. If it does grow back, you will get it next time.
- 4. Keep a plastic bag or trash can nearby so that you can isolate weed material as soon as you remove it from the ground. If that is not feasible and your hands are full, throw it onto a driveway or other hard surface. Avoid throwing it on the ground.
- 5. Be careful with weeds that are flowering. Resist the urge to shake soil off the roots, as you might just be helping that pesky invader to complete its mission, and that soil could be contaminated anyway. You can always fill divots with clean topsoil, if necessary. If you find a weed that has already gone to seed, cup one hand over the seedhead as you pull with the other hand so that the seeds don't blow away and escape into your garden.
- Dispose of all weed material in a green waste can.
 Don't compost it or leave it laying around. Some weeds are remarkably resilient and can release viable seeds or even take root again after being pulled out of the ground.
- 7. If you have a large property, work one area at a time, as it will give you a sense of accomplishment and you will be more efficient. If the task seems overwhelming, prioritize: concentrate on the larger weeds, the ones that are flowering, and the ones that are near your native plants. Don't forget to look underneath your shrubs and perennials; lots of weeds like to hide under there.
- 8. Drink lots of fluids your beverage of choice! Take breaks and treat yourself to a favorite snack. Reward yourself.
- 9. Unlike other garden maintenance tasks such as pruning and mulching, which often can be done in a day, weeding requires sustained effort throughout the rainy season because those pesky invaders just keep coming. Don't get discouraged; keep at it. Strive for improvement, not perfection, each time you go outside to pull weeds. If you have recently started your California native garden, you may need to do more weeding now than in later years, when your lovely native plants are covering more open ground.

If this sounds like back-breaking hard work and drudgery, let us explain how we think weeding can be beneficial for both you and your garden:

- Weeding is a form of exercise. Repeatedly bending from the waist, reaching, pulling, straightening up and throwing strengthens the muscles in your arms, legs and torso, and burns 200-400 calories per hour. While you are outside weeding, soak up the sunlight and breathe in the fresh air – that's good for you too!
- 2. Weeding gets you out into your garden and gives you a close-up view of what is going on. You might experience the joy of seeing a young perennial blooming for the first time, a favorite tree sprouting, or something unexpected like a native Wild Cucumber (Marah macrocarpus) poking its way up through the soil. Or you may notice something that needs attention like a shrub that has been attacked by a gopher or a tree that needs staking after a rainstorm. Make mental notes or carry a small notepad and jot down notes of things that you may need to go back and fix later.
- 3. Weeding is also a wonderful way to connect with Mother Nature. As you are working your way through your garden, try not to focus only on the weeds. Yes, you have a job to do, but allow your eyes to take in all the beauty around you. Late winter is a magical time in the garden. Step back and admire the fresh green foliage of a shrub after you have finished weeding around it. Stop and appreciate the birds, bees, butterflies and insects that you have attracted into your garden. Tune into the sounds of the birds and see how many calls you recognize. Or, if you prefer, you can strap on your smartphone and earbuds and listen to music or an audiobook while you are weeding, or turn on the speaker and have a nice, long conversation with a friend or loved one. Before you know it, your garden will be looking great and you will be feeling great.

The winter rains are a blessing and we are so grateful for them, but they foster fast-growing weeds that impair the beauty and health of our beloved California native gardens. If weeding is too boring or too tiring for you, or you don't have time, get a gardener to do it. Even the best California Native DIY Gardeners need a little help sometimes. Just please don't ignore the problem. Weed on, San Diego!

 $^{\sim}$ Sondra Boddy, Garden Committee Member Sondra is the owner of Maximum Impact Writing and can be reached at SondraB927@gmail.com .

CONSERVATION

Conservation Committee

March 7. First Tuesday evening of each month. Contact Frank Landis at conservation@cnpssd.org for location.

Busy Spring: Del Mar Mesa Development 1 and Mission Trails Revamp

Wow, what a busy winter. As I write this, I'm checking the news periodically to see whether the Oroville Dam fails, or whether the engineers keep the Sacramento Valley from trying to turn back into the "Inland Sea" it was before the 1920s.

This is hopefully irrelevant, but I have my doubts, because I'm reading the EIR for Merge 56, the first development slated for the eastern edge of Del Mar Mesa. The problem isn't particularly a CNPS concern. Their design, as I feared, has Deer Creek routed through a basin and storm drain through a pile of fill, and because the channel at that point makes a "Z," the culvert turns at a sharp angle from the upstream and downstream flows. Atop that fill is the southward extension of Camino Del Sur. I've protested this design for years, because most of the watershed above Deer Creek is paved over by Rancho Peñasquitos. As a result, we don't really know how high that creek can flood. While we can make some guesses based on 100 year floods and so forth, I keep wondering how it will handle a tropical storm or hurricane, or even a big atmospheric river getting weepy. Presumably their system will clog and the water will start chewing through the fill holding up Camino Del Sur. If the road/dam breaches, all the crap goes down canyon, chewing up those Nuttall's scrub oaks I've been trying to protect for years. Nothing big like Oroville, but as with the Oroville Dam's problems, which were predicted by environmental groups in 2005 (and ignored), it's a fairly predictable disaster.

Why not a bridge? Well, back in the 1960s when this project was originally put on the books, Deer Creek was a seasonal creek. It turned perennial around 2005 and stayed that way until 2016, when the drought finally convinced people to fix their upstream leaks and it became a bit more intermittent. Since it was a seasonal drainage back in the 1960s, it was thought appropriate to pile the dirt over a culvert and build a road on it. Then the City budgeted for that fill. Now that budget line is a

portion of what's available to build the road, and there's no way they can afford a bridge. They may well spend several bridges-worth on repairs in coming decades, but that's not considered a prudent investment now.

Now for the CNPS issues: that fill is atop a willow stand, in a wetland, and the fill from the road will extend onto MHPA/MSCP/parkland. And it will wipe out some Nuttall's scrub oaks (*Quercus nuttallii*), and isolate some vernal pools, and all the usual stuff. That's the problem: with so many developments, the destruction of native plants and rare vegetation is "usual stuff" now.

My questions, as a local resident, is whether we need the >400,000 square feet of office space, the movie theater, another grocery store (ours was closed for a year and no one complained. Now we get two?). I know we need more housing, but I wonder whether it will turn out to be another half-empty shopping center, surrounded by commuters going elsewhere, with disaffected boys in their teen and midlife crisis instars running wild through the Del Mar Mesa Preserve. This may sound morbid, but it's what we've got now.

What can you do? Quite a bit, actually. When I'm commenting for CNPSSD, I can only talk about impacts to plants and caused by greenhouse gases. YOU can write a letter or talk to city councilmembers about traffic, hydrology (they're saying no impacts, despite burying a wetland and putting a creek in a storm drain), and whether it makes sense to keep plopping down office space a half million square feet at a time, especially off SR-56, which won't be widened for another 20 years or so. Kind of makes a mockery of the City's Climate Action Plan, does it not? As private citizens, you're not constrained in what you can say the way I am. If you do want to get involved, email conservation@cnpssd.org for more ideas. Comments are due by March 27th.

And that's just the half of it.

Another half (probably one of about four) is the Mission Trails Regional Park Master Plan Update (MPU. Sorry if I caused your acronymitis to flare). This has been in process for some time. It's...odd, and not in a good way.

One odd thing is that the wildlife agencies didn't like the early draft, and insisted that the City include a "Reduced-Project Alternative," explicitly to get the City to scale back the number of proposed trails in East Elliott. I'm still looking for a map of the alternative, but it appears that the problem is that the City wants to build two new mountain bike trails on the north and south side of Sycamore Canyon Landfill, thereby connecting up two separate trail loops. To quote the Project EIR (PEIR,

p.417, 10-7), "the Wildlife Agencies requested the removal of these trail components to protect existing intact habitat, decrease the potential for the incursion of exotics [sic] species, and avoid disruption of wildlife movement, restriction of wildlife refuge areas, and negative effects to wildlife composition." Sounds like an eminently practical goal. Why is the City so resentful about leaving a bit more of Sycamore Canyon to the wildlife?

And why does this matter to CNPSSD? There are quite a few sensitive plants in East Elliott, including the endangered willowy monardella (*Monardella viminea*). Indeed, the MPU PEIR talks about potential impacts (literal, I'm afraid) to the willowy monardella and six other rare species as a result of building new stuff, although it promises to attempt to mitigate by, um, regular stuff that doesn't normally work all that well (I'm paraphrasing).

Anybody want to have a little conversation with their councilmembers about why we need parks to protect rare plants and animals, not just to cater to the trail riders? Good, I'm glad you're volunteering, because the reason the mountain bikers get their trails and we lose our plants is that they speak up and we stay silent. Too many assume, for some reason, that once something is in a park, it's safe in perpetuity.

Here's the truth: SANDAG overpromised how much money it could deliver through its tax hikes, so there's not enough funding right now (perhaps ever) to pay for all the land management that the MSCP promised in places like Mission Trails. If you thought your taxes paid for enough rangers to keep the plants safe, so that all you had to do was grow a native plant garden and take the occasional hike, I'm sorry, it turns out that we were all misinformed. The system is underfunded. We're going to all have to pitch in, volunteer, speak up, and do more, if we want our wild places and species to continue to exist in this changing world.

Add to this the simple fact that we don't turn up at public meetings, and all too often, when we do turn up, we don't speak. We depend on others to do the work for us, and our silence is taken as consent to build. We'll lose everything we value if we continue to tend our own gardens and stay silent in public.

Mission Trails is an important park for us. If you walk there, especially if you care about its native plants, you NEED to tell your councilmembers and park staff that you care about the plants, and that you're perfectly okay walking or biking further if that means that the plants (and the animals) keep a bit of room to live in an increasingly crowded city. You don't have to be nasty about it—indeed, you should be polite and take the time to get to know them and their staff—but you do need to make your views, our presence, known. The deadline for comments is March 8th. Even if you're not a San Diego resident, make your voice heard. To make it a bit easier, here is contact information:

District 1: Councilmember Barbara Bry, (619) 236-6611, barbarabry@sandiego.gov

District 2: Councilmember Lorie Zapf, (619) 236-6622, loriezapf@sandiego.gov

District 3: Councilmember Chris Ward, (619) 236-6622, christopherward@sandiego.gov

District 4: Council President Myrtle Cole, , (619) 236-6622, myrtlecole@sandiego.gov

District 5: Council President Pro Tem Mark Kersey, (619) 236-6622, markkersey@sandiego.gov

District 6: Councilmember Chris Cate, (619) 236-6622, chriscate@sandiego.gov

District 7: Councilmember Scott Sherman, (619) 236-6622, scottsherman@sandiego.gov (the park is in his district)

District 8: Councilmember David Alvarez, (619) 236-6622, davidalvarez@sandiego.gov

District 9: Councilmember Georgette Gómez, (619) 236-6622, georgettegomez@sandiego.gov

If you want help on commenting on this or any other EIR, contact me at conservation@cnpssd.org.

And finally, here are some pictures of the plants. Aren't they worth preserving? You need to tell others this.







San Diego thornmint (*Acanthomintha ilicifolia*), Orcutt's brodiaea (*Brodiaea orcuttii*) and San Diego goldenstar (*Bloomeria clevelandii*)



Coast barrel cactus (Ferocactus viridescens)

(Photos courtesy of The Chaparral Institute)

~ Frank Landis, Conservation Chair

RESTORATION

Great Challenges, Greater Accomplishments

We were to have an adventure – just two boys going out alone in uncharted territory. Andy is a 5-year old neighbor and this was our first time out with just the two of us. His mother packed water and a snack in his backpack. He added sunglasses and a notepad just like he has seen grownups do. Then we went exploring in some seldom visited parts of a 400-acre open space that our CNPS group has restored.

For Andy this is certainly an adventure where he could look for animal signs and hunt for a hidden waterfall. For me this is a chance to share some of the many natural wonders that have returned since we removed the weeds (of course, I will also note any remaining invasive weeds that will need future attention.)

What once was a ranch that turned into a degraded nonnative grassland is now a vibrant, vital and verdant wildlife habitat. Andy has only known this place after restoration. Even when Andy and his brothers helped me plant acorns some three years ago this place was alive with wildlife. We begin making our way through coastal sage and the plants are as tall as he is. I can just imagine how it looks from Andy's perspective.

He first discovers gopher holes that require some attention. We dig out the center of one to let in some air, then sit back and wait to see how long it will take for the owner to reseal the breech. While we wait we have time for the other things nearby. We count birds and follow ants. We examine plants, noting different leaf shapes and sizes. We crush leaves and sniff the wonderful aromas. Of course, Andy finds insects hiding on almost every plant. The gopher doesn't come but

even with our short attention span this has been time well spent.

We press on toward the elusive falls making our way into the riparian corridor. Andy finds tracks from deer, coyote and raccoon. I try to convince Andy that the little raccoon 'hand' and 'foot' prints where left by little people but he knows me too well. We have been doing this since he was two so he quickly challenged my assertion. So, instead we talk about the reason these animals are here. He begins to understand the relationships between water, plants and animals.

Before long the willows give way to reeds, indicating we are approaching a pond along the stream. We are excited because we can see open water and the falls must be near! The vegetation is much thicker now. Bull rush and cattails block one way, forcing us first around and then to clamber through a willow stand. There it is. From the pond water spills through a chasm some ten to fifteen feet deep. We stand on top and enjoy the view but this can't last long for these two short attention span boys. We have to find a way to the bottom to see things from that angle. So rock climbing is our next adventure.

We work out hand-hold and toe-holds. Our limbs are somewhat different length so Andy is just about on his own for this. Of course, like any 5-year old, he is still a functional simian so it's hardly an issue for him. Midway down we discover a chalk *Dudleya*. No time to stop now but we will return to examine the discovery a little later.

Once we reach the bottom of the falls we look for a way across. But the pool is too big for that so we decide to sail boats instead. Andy makes his boats and shares his assessment of each. Grass doesn't make good boats. Willow twigs are pretty good. Willow bark can be really good. The willow bark boats float out to the main current and then get swept away down the stream. And each test leads to new questions.

Where do the boats go when they are swept away? We try to follow but that way is blocked. Where does the water go? We discuss the stream going to the river and the river going to the ocean. How deep is the pool where the failed boats sank? We break off a dead branch and probe the depth. We can't reach the bottom but Andy takes note of how the branch seems to bend when in the water. Oh, there is still that *Dudleya* to examine further.

We climb up and note its features. The succulent leaves store water which may allow it to grow on this bare rock. The rosette foliage may capture moisture from the mist. There is a dried flower stalk left over from last year, which allows us to talk about flowers, pollination and

seed. Two budding botanists make observations and share ideas.

Once that is done, we turn our attention to the chasm. Can we possibly get across? Hum, there is a way down but can we find a way back out? The smaller ape has no doubts but we decide the bigger kid should lead. On the other side we find *Dudleya edulis*. How is it different and how is similar to the *Dudleya pulverulenta* on the other side?

Still succulent. The dried flower stalks seems alike. The leaves here are like crayons just sticking out of the box instead of flat. Andy is just beginning to read and doesn't yet write. However, he is carrying a notebook in his backpack so we decide these observations are worthy enough to note. The yellow marker swipes across a page as Andy puts down his thoughts in his own shorthand script.

The sun is beginning to get lower in the afternoon sky. We hold out our extended hands to see the distance from the horizon and sun in hand width units. This tells us we have about another hour before dusk so it is time to return home. Andy insists we go back the way we came while I think we can continue on and discover more. I can win this one since he won't go alone. So we set out along a new hillside.

The drought has left this south facing slope more open than I remember it. It makes finding barrel cacti very easy. We note the shape and of course the thorns. Then we find *Opuntia*. Another opportunity to compare and contrast. The shape is very different but both are plump and both have thorns. The thorns are sort of the same but sort of different. The *Opuntia* has fruit which looks tasty. Andy asks if we can eat it. I say yes but worn him about the little thorns on the fruit. Perhaps better to leave this alone for now. Yet more good observations for the log.

We round the base of this hill. From here Andy can see houses in the distance. He recognizes them and can tell where we are so he takes the lead to get us home. We are torn between getting home and the chance for more discovery. There is time for a few new plants. Andy also picks up a deer skull he finds to take to his mom. Only the approaching dark can end our adventure.

What do we get when we do restoration? We get native plants, of course. The native plants attract wildlife. On top of that we get enthusiastic new naturalists; sometimes, like today, we get one, more often in groups we recruit many.

Why do we do restoration? Need you ask? Seeing a place

return to life is reward enough. The added bonus is seeing others share in the wonder of nature and to be able to share with them how very special our part of the world really can be.

~ Arne Johanson, Invasives Committee invasiveplants@cnpssd.org

Old Town Native Plant Landscape

March 11, Saturday; 9:30 am to noon

The Old Town Native Landscape needs your help thinning out weeds and pruning shrubs. We hope to see that the rains brought up lots of wonderful native flowering annuals!

Bring drinking water, hat, gloves, and your favorite tools for these jobs. An ordinary table fork with wide tines makes a dandy weeding tool and sharp scissors that you don't mind getting wet with weed juice can be used to snip away weeds from right around desirable annuals, without disturbing their roots in the soil.

The Landscape is north of the MTS bus/trolley/train station at Taylor and Congress Streets. This is the west end of the Park. If you come by public transit just cross at the corner and come in under the trees where we have signup, tools, handouts, and the work party leaders will find a task for you. Or if you drive, there is free parking in the lot between Calhoun and the Landscape just east of Taylor Street. Questions? Contact oldtownlandscape@cnpssd.org.

RELATED ACTIVITIES

Seaside California Native Plant Garden Tour

Sunday April 9, 2 pm. Come see over 18 Native Plant Gardens in the Historic Seaside Neighborhood in Downtown Oceanside! Plant experts and neighborhood locals will lead a free 1.5 mile walking tour to see these wonderful front yard gardens. Meet at 2 pm, Sunday, April 9 at St. Mary's School parking lot at 515 Wisconsin Ave. Kids will be selling lemonade and cookies along the route. St. Mary's School is one block east of the 101 Cafe near Coast Highway and Wisconsin St. The Oceanside Coastal Neighborhood Association and the Buena Vista Native Plant Club sponsor our 15th Annual Tour. Info: 760-439-2473, www.BVAudubon.org or www.OCNA101.org.

Mt. Helix Park Adopt-A-Plot Program

Join a team of plant enthusiasts and California native plant experts committed to restoring Mt. Helix Park's landscape to a California native habitat. More than 20 committed volunteers signed on in 2016 for the Park's Adopt-A-Plot program and have already made a huge difference in both reducing the number of invasive weeds and restoring native plants throughout this historic hilltop. With many plots still available, this program offers volunteers the chance to learn, not just about habitat restoration, but best practices for growing and cultivating California native plants for use in their own gardens. Park certification is required prior to joining the Adopt-A-Plot team and is provided by Mt. Helix Park. To volunteer for this or any of the Park workdays and projects, contact Peggy Junker at pjunker@mthelixpark.org or by calling the Park office at (619) 741-4363 Monday, Wednesday or Friday from 9 am until noon.

Wildflower Hotlines

DESERT WILDFLOWER HOTLINE: Anza-Borrego Desert State Park: (760) 767-4684. Info, events, road conditions (760) 767-5311 or

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

WILDFLOWER HOTLINE: March to May call the Theodore Payne Foundation hotline: (818) 768-3533 for info on blooms in Southern California and elsewhere; visit www.theodorepayne.org.

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, Nov 10 for the Dec newsletter, etc. Please submit items to newsletter@cnpssd.org

CNPS-SD Activities Calendar March 2017

3/1: Board Meeting, p.2

3/7: Conservation Committee Mtg, p.5

3/8: Garden Native Mtg, p. 2

3/19: Field Trip – ABDSP Plum Canyon, p.1

3/11: Old Town Native Landscape Work Party, p.8

3/21: Chapter Meeting, p.1

4/1-2: Garden Native Tour

	MEMBERSHIP APPLICATION
	_Student or Limited Income \$25;Individual \$45;Family \$75
Plant	over \$100;Patron \$300;Benefactor \$600;Mariposa Lily \$1,500
Name(s): _	
Address: _	
Phone:	e-mail:
Mail check payab	e to "CNPS" and send to: CNPS, 2707 K Street, Ste 1, Sacramento, CA 95816-5113.

CALIFORNIA NATIVE PLANT SOCIETY

San Diego Chapter C/o San Diego Natural History Museum P. O. Box 121390 San Diego, CA 92112-1390 Nonprofit Organization
U.S. Postage
PAID
PERMIT NO. 1522
San Diego, California



March 2017 Newsletter

Dedicated to the preservation of the California native flora CALIFORNIA NATIVE PLANT SOCIETY – SAN DIEGO

www.cnpssd.org

info@cnpssd.org

BOARD MEMBERS PRESIDENT: Bobbie Stephenson......president@cnpssd.org (619) 269-0055 VICE PRES: Tom Oberbauer.....vicepresident@cnpssd.org SECRETARY: Michael Evans.....secretary@cnpssd.org TREASURER: Connie di Girolamotreasurer@cnpssd.org Cindy Burrascano....... (858) 342-5246; booksales@cnpssd.org Bob Byrnes......Bob.Byrnes@cnpssd.org Mike Gonzales.....programs@cnpssd.org Frank Landis.....(310) 883-8569; conservation@cnpssd.org Sue Marchetti.....nativesfornovices@cnpssd.org Joe Sochor......Joe.Sochor@cnpssd.org **CHAPTER COUNCIL DELEGATE** Frank Landis.....chaptercouncil@cnpssd.org RARE PLANT BOTANIST Fred Roberts.....rarebotanist@cnpssd.org (760) 439-6244 APPOINTED COMMITTEE CHAIRPERSONS BOOK SALES: Cindy Burrascano.....booksales@cnpssd.org (858) 342-5246 CONSERVATION: Frank Landis......conservation@cnpssd.org (310) 883-8569 EDUCATION: OPEN FIELD TRIPS: Joe Sochor.....fieldtrips@cnpssd.org HOSPITALITY: Kye Ok Kim.....hospitality@cnpssd.org INVASIVE PLANTS: Arne Johanson (858) 759-4769 &

Bob Byrnes.....invasiveplants@cnpssd.org

LEGISLATION: Peter St. Clair Old LownLandscape@cnpssd.org
LIBRARIAN: OPEN
MEMBERSHIP: Connie di Girolamomembership@cnpssd.org
NATIVES FOR NOVICES: Sue Marchetti
nativesfornovices@cnpssd.org
GARDEN NATIVE: Mike Gonzalesgardening@cnpssd.org
HABITAT RESTORATION: Arne Johanson (858) 759-4769 &
Bob Byrneshabitatrestoration@cnpssd.org
NEWSLETTER: Bobbie Stephensonnewsletter@cnpssd.org
(619) 269-0055
OLD TOWN NATIVE PLANT LANDSCAPE: Peter St. Clair and
Kay StewartOldTownLandscape@cnpssd.org
PLANT PROPAGATION: Jim Wadmanpropagation@cnpssd.org
619-294-7556
PLANT SALE-FALL: Carolyn Martusplantsale@cnpssd.org
PLANT SALE-SPR: Mike Gonzalesspringplantsale@cnpssd.org
POSTER SALES: OPENpostersales@cnpssd.org
PROGRAMS: Mike Gonzalesprograms@cnpssd.org
PUBLICITY: OPENpublicity@cnpssd.org
PUBLIC OUTREACH: Mike Gonzales (temp)
publicoutreach@cnpssd.org
RARE PLANT SURVEYS: Frank Landisraresurvey@cnpssd.org
(310) 883-8569
SEEDS & BULBS: Cindy Hazukaseeds&bulbs@cnpssd.org
VEGETATION: OPENvegetation@cnpssd.org
WEBSITE: Joe Sochorwebmaster@cnpssd.org