



CALIFORNIA NATIVE PLANT SOCIETY
San Diego Chapter Newsletter

CHAPTER MEETING

Tuesday, December 15
Casa del Prado Room 101
Balboa Park 7:00 p.m.

HOLIDAY PARTY

OBERBAUER OFFERS OBSERVATIONS

...at our Holiday Potluck! Yes, **Tom Oberbauer** will again regale us with stories and pictures of his adventures among the plants, but you still gotta bring food...because that's what a potluck is! Just bring something delicious--preferably finger food. Your Hospitality Committee will provide the usual coffee/tea, mulled cider, utensils, cups, napkins and plates, all against a background of twinkling, festive, evergreen, more or less native, decor. Let's make the magic happen at our December chapter meeting. Come and make merry with us!

~**Betsy Cory**, Hospitality Chair

San Diego County Mountains and Foothills and the Rare Plants on their Unusual Soil Types

During the spring and summer of 2015 **Tom Oberbauer** participated in surveys sponsored by SANDAG with AECOM to find a number of lesser understood rare plants. A number of interesting mountains were visited ranging from Otay Mountain, San Miguel Mountain, and Lawson Peak to Potrero, Syquan, Guatay and Black Mountains and Cuyamaca Peak. Most of these mountains have gabbro (black granitic rock) substrates that have high concentrations of magnesium and iron similar to serpentine, but others

are composed of metavolcanic rock that remains from the Cretaceous period when parts of San Diego County existed as an island arc with volcanos 15,000 to 18,000 feet high. *Packera ganderi* (Packer's ragwort) is one of the most wide ranging species encountered; however, *Nolina interrata* (Dehesa beargrass), *Salvia clevelandii* (Cleveland sage), *Calochortus dunnii* (Dunn's mariposa lily) and *Lepechinia ganderi* (Gander's pitcher sage) were just a few of the other sensitive species observed. Tom also visited Miller Mountain and *Brodiaea santarosae* (Santa Rosa Basalt brodiaea) in a very obscure part of San Diego County. Tom has written a couple of articles for the newsletter about the individual treks to these mountains and will provide more in the coming months. In the December program, Tom will present a visual tour of these areas and their unique resources.

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

7:30 p.m. – presentation.

Chapter meetings are free and open to the public.





Early in the 20th century, many different flowers and color themes were used for holiday greetings. Here are three vintage California postcards (circa 1910-1915) that featured California poppies, and one even has California poppies and toyon, also called Christmas berry. The poinsettia, still now a floral symbol of the winter holidays, is native to Mexico & Central America and was introduced into the U.S. in 1825.

~ **Bobbie Stephenson**, President

BOARD MEETING

Wednesday, December 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. If you wish to discuss an issue, please email president@cnpsd.org to get your issue on the agenda.

November Board Meeting Report

Your CNPSSD Board met on November 3, 2015. The main items on the agenda were a review of the fall plant sale, preparation for the Board election, and appointment of a replacement of our out-going Board member David Varner, who recently moved to Colorado. As with each meeting, we reviewed the Chapter financial report, entertained reports from each of the Chapter committees (as appropriate) and discussed new ideas on

interacting with Chapter members and the general public. **Connie di Girolamo** (Treasurer and Membership Chair) reported that the 2015 Plant Sale contributed more money to the Chapter than any of the last five plant sales! Thanks to the organizers and all the volunteers for their hard work.

The Board appointed **Joe Sochor**, who has been assisting David Varner with CNPS Chapter Council duties, to fulfill the remainder of David's term on the Board. **Bobbie Stephenson** was elected at the September Board meeting as Board President and has taken over David's duties as Chapter Council representative.

The Board heard a presentation by a local video production company on the potential use of online videos to highlight Chapter activities. Conservation Chair **Frank Landis** announced an anonymous donation of \$5,000 to our Legal Fund. **Dave Flietner** reported on the progress of the Sunset Cliffs native garden; the garden is about one-half planted and still needs volunteers for planting and maintenance. The Board voted to donate \$500 to the citywide Canyonlands effort for a comprehensive environmental data collection and utilization project.

~ **Mike Evans**, Board Secretary

WELCOME NEW MEMBERS!

Catherine Cosner
Trisha Devine
Edie Drcar

Carol Landry
Theresa Mann
Daniel Preciado

TECOLOTE CANYON NATURAL PARK



December 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.

CHAPTER ELECTION

Congratulations to the following five members who were elected to serve on the Board for a period of two years each:

Carl Bell
Betsy Cory
Connie di Girolamo

Mike Evans
Frank Landis

BETSY NEEDS A BOSS!



Yes, **Betsy Cory**, Outreach Chair for CNPS-SD, needs a boss. She loves doing outreach but is a bit lazy and usually balks at doing events north of I- 8. She lives in a town far to the south called Chula Vista and dislikes driving north. So she needs a boss who can either do outreach events north of I-8, or can tactfully nudge others to do them. Thus, Betsy would be the assistant and her boss would be the Outreach Chair--one of the most prestigious positions in the CNPS-SD hierarchy! You can go to fairs, festivals, conferences, and other events, sit at a table, and show off all our colorful and educational materials. You can attract families with the Reptile Tester and the Operations Game (modified so that the patient is an unfortunate man who ate plants that need to be extracted). If you live north of the 8, enjoy talking to people, and like plugging native plants, this is for you! Betsy can provide excellent references from former bosses. She takes direction well and works well with others. So during this holiday season of giving, please consider giving Betsy the very, very bestest gift of all—a brand new Boss! (Gently used also acceptable.) If you're interested, please email Betsy at bcbetsycory@gmail.com.

NATIVE GARDENING

Native Gardening Committee

December 9. Meets 2nd Wednesday of each month. Contact **Mike Gonzales** at gardening@cnpsd.org for info.

Old Town Native Plant Landscape

Partners in Grime

Saturday, December 12: Work Party - 1 to 3 p.m.

Join Partners in Grime at the Old Town Native Plant Landscape. Short days, long nights, cooler weather means plants grow slower. We'll snip and tidy up some overgrown shrubs and do careful hand weeding around the native plants we planted in November. The Landscape is at the corner of Taylor and Congress Streets, the west end of Old Town State Historic Park. Park in the Cal Trans parking lot on Taylor; enter at the Juan Street traffic signal. It is a recreation of the landscape that provided for the needs of Native Americans in our region before the arrival of Europeans in 1769. Bring gloves, sun protection, pruners and weeders, or borrow ours. Questions? Contact Kay at fieldtrips@cnpsd.org.

RESTORE HABITAT

Sunday, December 6, 1:00 to 4:00 p.m. Planting Party in Rancho Penasquitos. Come help plant California buckwheat, cacti and other California native coastal sage scrub plants on part of Black Mountain that burned in 2014. Meet at the NE corner of Black Mountain Ranch Community Park, 14700 Carmel Valley Road, San Diego. Coordinates: 32° 59' 21" N Lat, 117° 7' 48" W Long. The organizers have digging tools and watering cans. Bring hat, sun screen, water, and gloves, if you have them. **Please RSVP to bethvfc@hotmail.com or 858-705-3775.**

RECEIVE YOUR NEWSLETTER ONLINE

To receive your newsletter via email, please contact us at:
newsletter@cnpsd.org

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

CNPS Garden Native Symposium: Facilitating Change through Education

Who can resist the beach on a perfect summer day? Well, over 120 lucky plant lovers had a truly irresistible excuse to be there on September 19, when CNPS and the CNPSSD Gardening Committee co-hosted the Garden Native Symposium at the Scripps Institution of Oceanography (SIO). In fact, the response was so positive that the Symposium will now be presented every fall as a prelude to the Fall Native Plant Sale and a companion event to the Garden Native Tour held in the spring.

The beach-side auditorium was nearly full as landscape professionals, gardening experts, native plant enthusiasts, and eager novices alike experienced a full day of lectures and discussions by renowned experts in native landscape design, native plant care, environmental justice, traditional uses of native plants, and much more. (Further details are at gardennative.org/symposium)

As an added bonus, the event counted as continuing education for members of the California Landscape Contractors Association (CLCA) and Master Gardeners.

Relevance

Most people already know that natives are environmentally beneficial. The most common motivations gardeners express for learning to landscape with natives are to remove their lawns and other nonnative ornamental landscaping to save water; create beautiful gardens portraying flowering plants with different blooming periods that provide an array of colors all year long; attract native wildlife and pollinators; improve storm water retention by the use of dry creeks and bioswales; and eliminating fertilizers and pesticides to improve water quality in our creeks, rivers, lakes, reservoirs and oceans that benefit water recreationists, surfers and the local ecology.

To this end, people want information. All our attendees considered the Symposium to be a valuable opportunity for the community, and most were hungry for more such educational CNPS events.

Enthusiasm and results

Symposium attendees left feeling much more confident about landscaping with native plants – so confident in fact that they're ready to take on not only their own lawns but any other lawn within their reach. As one attendee put it, "I'm going to use what I learned today in my garden and in my neighbor's garden. I'm

taking notes and I'm going to spread the gospel!" Others reported having dragged along doubting friends who ended up converts.

The event was also timed perfectly to take advantage of the CNPSSD Annual Fall Plant Sale just 4 weeks later at Balboa Park where all the beautiful plants showcased at the Symposium were on sale for the public to plant using the knowledge gained from the various presentations.

A community effort

We wish to thank all our supporters, especially to **Cammie Ingram** who sponsored the event at Scripps. In fact, Cammie was the lunchtime keynote speaker and touched on all the great native planting projects taking place throughout SIO and UCSD campus. Thanks to them, CNPS is able to provide true benefits to our community by teaching gardeners to embrace California's ecology for its unique gifts rather than looking elsewhere for inspiration.

We also want to extend humble gratitude to our presenters, who shared their expertise by donating their precious time in support of the cause: **Ari Tenenbaum, Clay Tschudy, Glen Schmidt, Greg Rubin, Norrie Robbins, Rick Halsey, Teresa Everett, and Tom Oberbauer.**

~ **Hei-ock Kim, CNPS Special Projects Coordinator, and the CNPSSD Gardening Committee**

CONSERVATION

Conservation Committee

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

Shameless Self Promotion

Normally I'd write an essay on the theme of whatever environmental issue is occupying my attention at the moment. Thanks to Bobbie Stephenson's indulgence (thank you Bobbie!), I'm going to do something different with this holiday-season column.

I've got some news: I finally finished my book. The title is *Hot Earth Dreams: What if severe climate change happens, and humans survive?* And, here's the story of how it came about.

Back in late 2012, I'd gotten well and truly sick of the Mayan Apocalypse (remember that?), and started

wondering what it would be like to write a novel set in the deep future on a climate-changed Earth. I started by asking myself the question: what will the Earth look like if severe climate change happens, and humans survive?

At that point, my brain froze, because even though I thought I knew a lot about climate change, I couldn't find the words or even an image. This future was, quite literally, unspeakable. I couldn't articulate anything. It felt like my mind hit a wall and stuck, and I suspected my friends (including some people who are reading this) were as blind as I was. That scared me, because it seems like a very likely future. So I asked around, and my intuition was right: nobody could talk about it. For awhile it was my great conversation killer, asking the question and watching people freeze and go silent, watching parents take long, sad looks at their children playing nearby, before they changed the subject. The best anyone could offer was "it'll look like *Waterworld*." I stopped asking.

Perhaps because I'm a little crazy or just an ecologist, I thought I could answer that question. I also suspected that people probably wanted to know the answer more than they wanted to read a novel based on it. So, with a great deal of trepidation, I started doing the research, and most of three years later, I've got the answer in the form of this book.

There was another reason for working on the book, and it actually forms chapter 16: why conserve native species if the climate is changing? Shouldn't we just let it be a survival of the fittest contest, even if the weeds win? Doing CNPSSD conservation chair isn't exactly a fun job. It's something we volunteers do because we think it's right and necessary. But if everything's going to die anyway, why bother saving it, especially if the work is so unrewarding?

I've presented the answer in previous columns, and it's fairly simple, albeit three-fold. First, we don't know exactly what will happen in the future. I've written what I think is a likely scenario, but likely is very far from certain. Second, not everything will go extinct, and we have little way of knowing which species will survive. Species that are very rare now (like ginkgos) were very common the last time the Earth was as warm as it might get, so we can't use current rarity or commonness as a guide to what to preserve and what to let go. Third, the climate will return to current temperatures eventually, no matter how much greenhouse gas we release. It's a question of whether it returns in hundreds of years or hundreds of thousands of years, not whether it will happen.

Sometime after that point, there will be another ice age, and all native species that are around now survived the previous ice age. It would be kind of stupid to let them all go extinct, given that track record, wouldn't it? What would live around here once it got cold again? Conservation in a changing climate is about preserving possibilities and options, more than fighting to preserve some intact remnant of the past, as if it were a museum. It's not simple, especially when most people still think about static species distributions and vegetation communities, but it's something we need to do. Figuring this out gave me a reason to continue working and a strategy to follow.

As for the book itself, it's 42 chapters, 900-6,000 words in length, each in the style of the conservation columns I've been writing now for five years. A couple of chapters are topics I've dealt with in this newsletter, but most of it is new to readers here.

I'm self-publishing the book, so it's available through Amazon, Createspace, and other outlets, and you can read the first five chapters at <https://heteromeles.wordpress.com/2015/11/03/hot-earth-dreams-sample/>. In this brave new world of non-fiction publishing, it's okay to self-publish a book while trying to sell it to a commercial publisher, because self-publishing shows if a book is popular enough to be worth a publisher's time. That's why I'd encourage you to buy the book now. The more people buy it and encourage their friends to buy it, the more likely it is to get commercially published, which will (among other things) let me get it into bookstores and libraries. If it's a topic that interests you, please buy this book. It's different than any other treatment of the topic, and I think you'll like it.

Happy holidays, and dream of a wet Christmas (just like the ones we used to know).

~ **Frank Landis**, Conservation Chair



Fruit of
lemonadeberry
(*Rhus integrifolia*).
Photo by Mike
Evans, CNPSSD
Secretary.

INVASIVE SPECIES

***Volutaria*: a New Very Invasive Knapweed in Borrego Springs and Newport Bay**

By Frank Harris, Kate Harper, Tom Chester and Ron Vanderhoff

A species of *Volutaria*, a knapweed from Africa, was first observed in the Borrego Springs area in 2010 as a single plant, although the population was undoubtedly larger at the time. A larger population was found in 2011, and it was identified as a *Volutaria* species. This was the only known location of this species in the United States until 2015, when another population was discovered in Upper Newport Bay, Orange County.

Its population in Borrego Springs in 2013-2014 had grown to at least 800 plants. In 2015 its population numbered at least 10,000 plants, despite heroic efforts being made by a number of volunteers to remove every single plant beginning in 2013-2014. The seed bank at the end of spring 2015 may contain as many as one million seeds waiting to sprout in future years. New populations continued to be discovered in Borrego Springs throughout 2015 (Fig. 1).



Fig.1: Vern Konan beginning removal of yet another new field of *Volutaria* discovered in Borrego Springs on 29 April 2015. Photograph by Frank Harris.

In March 2015 a separate population of over 3,600 plants occupying 0.3 acres was discovered and removed in Upper Newport Bay, Orange County (Fig. 2 next page). This population had obviously been present for at least one year, and maybe more. Unfortunately, seed had already dispersed, so there may be a seed bank that approaches one million seeds here as well.

A naturalized population of what look like the identical plants has also been discovered in the Atacama Desert Region in Chile. It is not known whether these occurrences are related, but they might be via the well-known California - Chile connection of plant species spread by migratory birds.



Fig. 2: Photographs taken of the Orange County population by Ron Vanderhoff.



Photograph by Frank Harris showing how high the plants can grow.



Flower photo by Tom Chester

This species is clearly potentially highly-invasive similar to *Brassica tournefortii* (Saharan mustard). Each plant produces roughly 2,500 seeds, allowing it to expand its population at a very high rate. ***It is extremely important to eradicate this species from the Borrego Springs and Newport Bay areas before it spreads further.***

In April 2015, the California Department of Food and Agriculture listed the species on the state Noxious Weed List and gave it an A rating. A-rated weeds are subject to state or county enforced action involving eradication, quarantine, containment, rejection or other holding actions. Clearly, more resources are desperately and quickly needed to have any chance of extirpating this invader. Very soon it will be nearly impossible to eradicate it.

It is also very important for people in the field to check for *Volutaria* in other areas. **If you think you have found plants of *Volutaria*, contact any of the authors of this article through Tom Chester at tom@tchester.org.**

For much more information, including many pictures of plants at various stages, from seedlings to fruit, see our extensive webpage on this species at: tchester.org/bd/species/asteraceae/volutaria_canariensis.html.

RELATED ACTIVITIES

Anza-Borrego Desert State Park Botany Society

December 14, 10 a.m. Carl E. Bell, a weed warrior (and new Board member of CNPSSD) with 35 years of experience as UC Cooperative Extension Regional

Advisor in Southern California, will talk to the Botany Society about **“What’s up with these Invasive Plants** at the Anza-Borrego Desert State Park Visitor Center, 200 Palm Canyon Drive, Borrego Springs 92004. Admission is free, and the public is invited. For society info visit <http://www.anzaborregobotany.org/>

January 4 – March 29, 2016 (weekly). The Botany Society’s 8th annual 13-week Certification Course will be held at the Anza-Borrego Desert State Park’s Visitor Center. No charge for the course, but participants are expected to volunteer a minimum of 40 hours a year for at least two years. People interested in enrolling should send an email to thebotanysociety@gmail.com.

Point Loma Native Plant Garden

December 5 & 20, 9 – noon. Work Party. Usually the first Saturday and third Sunday of each month. Contact: Richard@sandiegoriver.org for more info.

DESERT WILDFLOWER HOTLINE

Anza-Borrego Desert State Park: (760) 767-4684.
Info, events, road conditions, etc.: (760) 767-5311 or www.desertusa.com/wildflo/wildupdates.html.

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@cnpssd.org.



CNPS-SD Activities Calendar December 2015

- 12/1: Conservation Committee Mtg, p.4
- 12/2: **Board Meeting**, p.1
- 12/6: Tecolote Cyn field trip, p. 2
- 12/6: Planting Party at Black Mtn, p.3
- 12/9: Gardening Committee Mtg, p. 3
- 12/12: Old Town Native Landscape, p.3
- 12/15: **Chapter Meeting & Holiday Party**, p. 1

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.

CALIFORNIA NATIVE PLANT SOCIETY

San Diego Chapter
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San Diego, CA 92112-1390

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December 2015 Newsletter

Dedicated to the preservation of the California native flora

CALIFORNIA NATIVE PLANT SOCIETY – SAN DIEGO

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