

CALIFORNIA NATIVE PLANT SOCIETY San Diego Chapter Newsletter

CHAPTER MEETING

Tuesday, September 20 Casa del Prado Room 101 Balboa Park

Why Are There So Many Manzanitas? An Ecological and Evolutionary Journey

by Mike Vasey and Tom Parker

The California Floristic Province is the heart of manzanita biodiversity, where they are the "rock stars" of woody shrub diversity. Ranging from the Sierra Nevada Mountains to coastal bluffs along the Pacific Ocean, from temperate rainforests along the North Coast to arid mountain slopes in Southern California, a wealth of manzanita species and subspecies can be found in an astonishing array of environments. The new Field Guide to Manzanitas: California, North America, and Mexico from Michael Kauffman, Tom Parker, and Michael Vasey, with photographs by Jeff Bisbee, includes color photographs, range maps, regional keys, descriptions, a brief history of each species, and selected locations where you can find manzanitas in the field. It is available at the CNPS Store.

NATIVES FOR NOVICES:

6:30 to 7:00 p.m. Presenter: **Judie Lincer POOL TO POND:** "Back to California Wetlands"

Learn how Judie turned her swimming pool into a beautiful wetland pond with all the critters that belong there.

CNPS-SD Now on Social Media

The Chapter now has two new social media platforms, **Twitter** and **Instagram**, delivered with two deft strokes on August 2.

twitter.com/cnpssd

Look for a banner with draping *Ribes roezlii* (Sierra Gooseberry). You'll read here the quick lowdown of chapter events and activities and get introduced to some of our allies in California. Please follow us and heart us and message us and mention us. You'll be the highly informed member for it. And if you have a thematically related account, we just might follow you back.

instagram.com/cnpssd

Here you'll find all photos and short videos, visual representations of everything we love and stand for. Follow us here, give us a lot of love (in half-second clicks and 10 second comments). Over time, you'll have a visual gallery by which to be inspired in all your California native plant explorations.

Also, we continue with several daily posts on Facebook at: **facebook.com/cnpssd** And our <u>Garden Native Committee</u> continues to offer several weekly posts at their Facebook: Facebook.com/gardennativeSD and Instagram: instagram.com/garden.native

Michael Vasey, Ph.D. is a long-time lecturer of conservation biology at SFSU, and is the Director of the San Francisco Bay National Estuarine Research Reserve. His research focuses on summer coastal fog influence on maritime chaparral eco-physiology and species diversity. He is co-author for the treatment of

Arctostaphylos in the FNA and in the Jepson Manual (2nd edition), and is co-author of the Manzanita Field Guide.



Mike Vasey

Tom Parker, Ph.D. has been the Professor of Biology (Ecology) at San Francisco State University (SFSU) since 1980. His academic training was at the University of Texas (B.A.) and the University of California, Santa Barbara (M.A., Ph.D.). His research concerns community and evolutionary ecology focused on the dynamics of plant communities. He is the lead author for the treatment of *Arctostaphylos* in the *Flora of North America* (FNA) and in the 2nd edition of the *Jepson Manual*, and is co-author of the *Manzanita Field Guide*.



Tom Parker

BOARD MEETING

Wednesday, September 7, 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!

Giana Crispell Robert Glaser & Sandra Moore Bill Matella Antonet O'Toole Patricia Roscoe Janet Shields Denise Van Ostaeyen Monica Winters

NATIVE GARDENING

Garden StoriesDon Rideout's Garden Story

I have been interested in native plants since I was old enough to know what a native plant was, but I didn't learn much about them until much later in life. Around 1990, I starting planting some native plants in my yard. My job gave me the opportunity to learn from some experts such as Carolyn Martus and Tom Oberbauer. I got really serious about native plant gardening in 1995. Like many other gardeners I learned by trial and error...lots of errors. I gradually learned what works and what doesn't in my location, Encinitas. I never really had a plan, I just planted stuff where I thought it would look good and do well. I have no irrigation system, just a couple of hoses and a watering can. As a result, I don't water very often, and that has turned out to be beneficial for the most part. However, the drought of the last six years has been rough, and I have lost some older plants. It's hard when older plants die, but I'm trying to look at it as a process of renewal. There are a few plants that have performed outstandingly. One is a Del Mar Manzanita that I salvaged from a site that was being graded in Carlsbad in 1992. It's going strong and developing a nice burl. Another great performer is a Coast Live Oak that I bought as a 1 gallon plant at the CNPS plant sale in 1995. It is doing great despite the drought, possibly because I installed irrigation wells to get water down deep to the roots in warm weather. In my backyard is a Santa Cruz Island Ironwood that never gets any supplemental water and is about 25 ft. tall. In recent years I have tried to add diversity to the garden by including more Baja plants, geophytes, annuals, grasses, and bog plants. Constant weeding is necessary the keep the annuals going, but it's really worth it in spring. Outside the garden I have helped Dennis Mudd with Calscape which I think is a really great tool that I hope everyone will use. My thanks go to CNPS for being such a great organization.



Native Gardening Committee

September 14. Meets 2nd Wednesday of each month. Info: **Mike Gonzales** at <u>gardening@cnpssd.org</u>.

Garden Native Workshop

Saturday, September 10, 2016
!!! SOLD OUT!!!

Old Town Native Plant Landscape

The Partners in Grime will take a break from tending the Old Town Native Plant Landscape for the first time in seven years, in September and October, because we have almost eliminated the weeds — HOORAY! — and because many native plants are semi-dormant this time of year, so there isn't much growth to snip or groom or otherwise manage. So we will enjoy a restful break. During that time, we hope you will find time to go enjoy the serene simplicity of this landscape that all of our volunteer effort has created.

The next time we will gather will be for planting on Saturday November 12, 9:30 to Noon. We'll infill with more shrubby annual and perennial medicinal, edible, and useful plants in the 1/3 acre site, from containers

and seed. Then we'll go have a no-host lunch at a local restaurant to celebrate our accomplishments.

Expect an announcement in October!

Fall Plant Sale Saturday, October 15, 2016

Our fall plant sale will take place on Saturday October 15th, at the courtyard next to the Casa del Prado, across from the west entrance to the Natural History Museum in Balboa Park. CNPS members ONLY are invited to pre-order your plants and have them waiting for you by the curb! Instructions on pre-ordering will be posted on our website around September 1st and orders are due by September 23rd. We will be ordering plants from Recon Native Plants, Moosa Creek Nursery, and Tree of Life Nursery. Our own CNPS propagation committee has also been very busy growing plants for the sale. There will be some new plants for sale this year, check our website for details.

VOLUNTEER FOR THE SALE

The plant sale committee is looking for volunteers to help with this year's sale.

Seed Team: Help clean and package seeds

Publicity: Help distribute flyers, simply download one from our website and post it in a public place.

Volunteer the day before the sale: We need lots of helpers the Friday before the sale from 9 am to 12 to help set up the sale.

Volunteer the day of the sale: We need lots of helpers on the day of the sale from 8 am to 4pm.

Before the sale: We need a few volunteers the Wednesday or Thursday to help tag plants, at nurseries in San Diego County about 4 hours of your time.

For more information: plantsale@cnpssd.org

~ Carolyn Martus, Fall Plant Sale Chair

Camp Pendleton Veterans Memorial Garden Needs a Coordinator

Camp Pendleton Veterans Memorial Garden is looking for a volunteer coordinator to take over volunteer work in the Memorial garden. It is usually on Saturdays and lasts for 3-4 hours in the morning. Many of the volunteers are military, either Marines or Navy. They are hard workers and are fun to work with.

The garden is about 1.5 acres in size. We do not have work parties every weekend, but about two weekends a month. We do have many tools, (chain saws, weed-whackers, shovels, hoes, rakes, hedge trimmers, brooms, wheel barrows). We also have limited funds we can use for plants, mulch and irrigation repair.

(It should be noted that a largest benefactor in the form of plants to the Camp Pendleton Veterans Memorial Garden is the Tree of Life Nursery owned by Jeff Bohn & Mike Evans.)

Anyone interested please contact Robert Warrick, gwarrickster@gmail.com, 760-439-4743-h, 760-730-2349-c.

CONSERVATIONConservation Committee

September 6. First Tuesday evening of each month. Contact **Frank Landis** at conservation@cnpssd.org for location.

Lilac Hills Ranch, TransNet Taxes, and the November Election

You're planning on voting in November?

Good. I can't stress enough how important it is to vote this year. As I've noted before CNPS doesn't advocate for or against particular politicians, but we can and do speak up about issues and initiatives. Here I'm going to focus on two that will be on the November 2016 ballot in San Diego County: Lilac Hills Ranch and the TransNet Sales tax increase.

CNPSSD strongly advocates voting no on the Lilac Hills Ranch development. To be clear, no native plant will go extinct if it gets built. When it comes to growth, we're in favor of smart growth, not leapfrog sprawl, and especially not leapfrog sprawl that piles costs on people and plants outside the development.

If you're sick of the election already, here's the one thing to remember about Lilac Hills Ranch: It's the first of a rumored 41 big developments that want to do the same thing. So if you hate voting on complicated land issues, you want to **vote NO on Lilac Hills Ranch**. If it passes, there will be dozens more initiatives like it for you to hate voting on. You also want to tell your friends about the 41 more developments.

If you don't want to read the actual 660 (!) page-long initiative, here's some advice from County Supervisor Diane Jacob "When it comes down to it, I think the question before voters is actually a pretty simple one. Does the need for housing outweigh the difference between this initiative, the planning commission recommendation and the county General Plan? And I say no." She said this after the Supervisors voted 4-0 on August 2 to put it on the ballot, and after she was cautioned by a county attorney to not say anything about it.

The second big thing to realize is that the County (meaning us taxpayers) will be on the hook for building a fire station and road improvements for the development if we approve Lilac Hills Ranch. These don't look like CNPS issues, but they are, because Lilac Hills Ranch is in a high fire danger area. The County wanted the developers to build a new fire station to service the 1,743 new homes they want to build, but that new fire station isn't in the initiative we're voting on. When Lilac Hills' 1,743 homes face a wildfire, they're going depend on the local rural fire district, plus whoever can get there to help. Unfortunately, the local roads are all narrow and twisty, so if we want the 4,000 plus Lilac Hills Ranchians to be able to evacuate quickly as the firefighters fight desperately to save them, we'll have to pay for all the road upgrades that aren't in the initiative either.

Of course, if those thousands of people want to travel, they all will get on I-15, which will get even more jammed than it currently is. Unfortunately, CNPS doesn't talk about traffic jams except as they contribute to greenhouse gases. However, if you ever drive I-15 past Valley Center for human activities or to visit native plants, just realize that Lilac Hills Ranch will add another delay to your trip.

Realize also that you can help vote it down and discourage other developers from spamming our ballots with big new out-there developments. If you want to get more involved, go to http://saveoursdcountryside.org/ or San Diegans Against Lilac Hills Ranch on Facebook.

Speaking of roads, on August 3, the CNPSSD Board of Directors voted to support the TransNet tax initiative. It will raise our sales taxes ½ cent to raise about \$18 billion over the next 40 years to pay for the following:

- Open Space \$2 billion
- Local Infrastructure Projects \$4.3 billion
- Highways, Managed Lanes, and Connectors \$2.3 billion
- Transit Capital and Operations \$7.5 billion

- Active Transportation \$540 million
- Local Arterial Traffic Signal Synchronization Grants \$178 million
- Local Rail/Local Road Grade Separation Grants \$900 million

(source: http://priorities.sandag.org/)

The item we're most in favor of is open space, which is intended for "Open space acquisition to implement the region's habitat conservation plans and support longrange plans to preserve 55 percent of our county as open space, and land management activities to maintain trails and remove non-native invasive vegetation that can contribute to wildfires; these funds for preserved open space can help reduce the risk of wildfires." We're hoping that some of this money goes to projects like protecting vernal pools on Otay Mesa, and possibly to invasives control of the kind that our invasives committee practices so well. The rest is the predictable mixed bag of transit stuff. alarmed San Diego's climate activists, but I should note that Transit Capital and Operations chunk is entirely for rail, trolley (including a new trolley line from the border to Kearney Mesa), and transportation for "seniors, students, disabled, low-income, veterans." Additionally, the "Active Transportation segment" is for pedestrian and bicycle related projects, and the Local Infrastructure projects include fixing sidewalks and bike paths as well as filling potholes. While the road projects will promote more driving, we can hope that Tesla cars and the rumored Chevy Bolt will make it easier for those swarms of commuters to drive electric cars on our (hopefully formerly) potholed

In any case, if we're going to adapt to climate change, that will necessarily involve a lot of infrastructure overhaul, and some of the money to do this is in this initiative. It doesn't have the glamour of fighting Lilac Hills Ranch, but we do need to rebuild our infrastructure for the 21st Century, like it or not.

Just to finish on a grim note, the worst possible vote here is to backwards: For Lilac Hills Ranch and against the TransNet tax. That would bring in thousands of new commuters, without providing the funds to help them get around. Please don't t vote this way!.

~ Frank Landis, Conservation Chair

INVASIVES CONTROL

The San Diego Weed Management Area website is up and running! Visit it at www.sdwma.org. This link will direct you to the main page graciously hosted by the

San Diego County Agricultural Commissioner's office. You can find some useful information about our worst weeds and sources to help you as you manage invasive species. Please let them know if you have any comments or items you want to add to the website.

DO YOU LOVE BEING OUTDOORS? COME JOIN OUR WONDERFUL TEAM OF VOLUNTEERS!

Volunteering with the CNPS Invasive Plant/Restoration group gives you the opportunity to expand your knowledge of plants while making an important contribution to the health and viability of open spaces.

Our team of dedicated volunteers will work with you on a mutually agreeable schedule. We can equip you with the skills and knowledge that will help restore degraded lands so that they once again become valuable habitat.

Our flexible, hands-on, training program allows people to come and try it without further obligation. All learn more about the need for restoration and ways to help Mother Nature heal herself.

Contact Bob Byrnes at ddloverddlover@yahoo.com.

CNPS-SD LIBRARY

Here are some of the titles of the books in the CNPS Library in Casa del Prado, Room 104. Since they are in Room 104, we not to keep the cabinet doors open during our meetings in Room 101. If you would like to look at or check out (must be a member) any literature, please contact **Patricia Fishtein**, 619-280-8234 so we can arrange a time to meet. We have many great books for research or edification. See the list below.

~ Patricia Fishtein

The Jepson Manual, Higher Plants of California - J. Hickman A California Flora and Supplement (1968) - P. Munz

A field Guide to the Common and Interesting Plants of Baja

California - J. Coyle & N. Roberts

A Flora of San Diego County - M. Beauchamp

A Flora of Southern California by P. Munz

A Flora of the Marshes of California – H. L. Mason

A Manual of Southern California Botany - P. A. Munz

A Natural History Of Western Trees - D.C. Peattie

A Popular California Flora - V. Rattan

A Simplified Key to the Major Families of California

Flowering Plants – S. Hartman All About Weeds – E.R.Spencer

An Illustrated Guide to Arizona Weeds - K. Parker

An Illustrated Manuel of California Shrubs – H.E. McMinn

An Island Called California - E. Bakker

Biography an Ecological and Evolutionary Approach - $\ensuremath{\text{C}}$ B.

Cox, I. Healey and P. Moore

Botany for Young People and Common Schools: How Plants Grow – A. Grav

Cacti of California - E.Y. Dawson & E.Y. Dawson

California Coastal Plan - Coastal Zone Conservation Commissions

California Desert Wildflowers - P.A. Munz

California Mountain Wildflowers - P. A. Munz

California Rare Fruit Growers: Jojoba Handbook

California Shrubs - H. E. McMinn

California Spring Wildflowers (1961) - P. A. Munz

California's Changing Landscapes – Barbour & Pavlik

California's Coastal Wetlands

Chaparral SDNHM Publication – E.B. Higgins

Checklist go the Vascular Plants of San Diego County (3rd edition) – J. Rebman

Checklist of the Vascular Plants of San Diego County – J. Rebman

Checklist of Vascular Plants of San Diego County – M.G Simpson, S.C McMillan & B.L. Stone

Cis-Montane Plants of Southern California Coast to Mountains - Grennan

CNPS 2009 Conservation Conference Proceedings: Strategies and Solutions. CNPS Working Conference: Conservation Rare Plants and Legislation. Feb. 1982

Coastal Ecology Bodega Head (1973)

Coastal Plants of San Diego: SDNHM Publication #8 – E.B. Higgins

Coastal Sage Scrub Plants - A.J. Grennan

Colorful Desert Wildflowers of California and Arizona – G.B. and O.M. Ward

Conservation and Management Rare and Endangered Plants - Elias

Desert Wild Flowers – I. Geary

Desert Wildflowers – P. Munz

Dynamics and Management of Mediterranean-Type Ecosystems

Early Uses of California Plants - E. Ball

Ferns and Fern Allies of California – S.J. Grillos

Ferns of San Diego County - Helen Witham

Fire, Chaparral, and Survival in Southern California - ${\sf R}.$ Halsey

Five Southern California Oaks: Identification and post fire management

Flora of the Northern Mojave Desert - M. DeDecker

Flowering Plants. Santa Monica Mountains Coastal &

Chaparral Regions of S. CA - Nancy Dale 3

Flowering Shrubs of California – L. Rowntree

Forest trees of the pacific slope - Sudworth

Fundamental of Horticulture - J B Edmond, A.M. Musser &

FS Andrews

Gardener's Guide to California Wildflowers – K. Connelly

Gardening with New Zealand Plants Shrubs and Trees -

M.I.E. Fisher, E.Satchell, J. M. Watkins

Grass Yearbook of Agriculture

Grasses in California - B. Crampton

Gray's Manual of Botany - M.I. Fernald

Growing California Native Plants - M.G. Schmidt

Hamlyn Nature Guides Wild Flowers – H.L. Pursey

In Gardens of Hawaii - M.C. Neal

Introduction to California Desert Flowers - P.A. Munz

Introduction to California Plant Life - R. Ornduff

Introduction to Shore Wildflowers - P.A. Munz

Issues of "Trails" of the San Diego - Society of Natural History Manual

Know Your Poisonous Plants - W. James

Manual of the Flowering Plants of California (1925) - Jepson

Mockel's Desert Flower Notebook - H. Mockel

Morphometrics of Monardella Subgenus Macranthae

(Lamiaceae) - Linda S. Allen

Mushrooms and other Common Fungi of Southern

California - R.T. & D.B. Orr

Native Food Plants SDNHM Publication #3 – E.B. Higgins

Native Plants for California Gardens - Lee W. Lenz

Native Plants for Use in the California Garden Landscape - Labadie

Native Plants Torrey Pines State Reserve & nearby San Diego Locations – M.L. Fillius

Native Shrubs of Southern California - P.H. Raven

Native Trees of San Diego County SDNHM Publication #4 – E.B. Higgins

Native Trees of Southern California - P.V. Peterson

Natural History of Southern California – E.C. Jaeger & A. Smith

Natural History of the White-Inyo Range (1991) – C.A. Hall, editor

New Manual Of Rocky Mountain Botany (Vascular Plants) – J. Coulter

Oaks of the Southern Californian Floristic Province – F. Roberts

Ornamental Plants for Subtropical Regions - R.S. Hoyt

Pacific Coast Trees - H.E. McMinn

Plant Communities of Southern California - June Latting. Ed.

Plant Propagation: Principles and Practices – H.T. Hartmann & D.E. Kester

Plants for California Landscapes – A Catalog of Drought Tolerant Plants

Plants of the Foothills and Mountains: SDNHM Publication

#7 - E.B. Higgins

Plants, Man and Life - Edgar Anderson

Propagation Secrets for California Native Plants – J. De Hart **Roadside Plants of Southern California** (1984) - Belzer

San Diego County Native Plants – J. Lightner

San Diego Desert Flowers SDNHM Publication #6 -

E.B. Higgins

San Diego's Endangered Species - D. Robinson

Selected California Native Plants in Color - B Coate

Shrubs and Trees of the Southwest Uplands - F. Elmore

Strategies and Solutions, CNPS 2009 Conservation Conference Proceedings - Willoughby, Orr, Schierenbeck, Jensen

Temalpakh, Cahuilla Indian Knowledge and Usage of Plants - J. Bean

The Ecology of Southern California – P. Zedler The High Sierras: the American Wilderness

The Leaf Book A Field Guide to Plants of Northern California – I. Geary

The Natural History of Wild Shrubs and Vines - D. Stokes
The New Field Book of American Wild Flowers - H.W.
Rickett

The Wild Flowers of California – M.E. Parsons Torrey Pines Reserve

Trees and Shrubs for Dry California Landscapes - B. Perry Trees and Shrubs for Dry California Landscapes - B. Perry Trees of Balboa Park: SDNHM Publication — E.B. Higgins Vascular Plant Families — J.P. Smith Jr.

Vascular Plants of Western Riverside County:-An Annotated Checklist - Roberts, White, Sanders

Vernal Pool Inventory City of San Diego

Western Wild Flowers - C. Saunders

White-Inyo Range Eastern California - Hall

Wild Flowers of North Carolina – W.S. Justice & R. Bell

Wildflowers of California - Parsons

Wildflowers of California - Ulrich

Wildflowers of California (photog) – L. Ulrich, S. Lamb Woody Ornamental Plants of California, Oregon & Washington

BOTANY

Wilderness Nearby

It was May. Margie Mulligan had spent a couple of days looking around Iron Mountain mapping *Packera ganderi* (Gander's butterweed), *Lepechinia cardiophylla* (Heart-leaved pitcher sage), and looking for *Baccharis vanessae* (Encinitas baccharis) and *Clinopodium chandleri* (San Miguel savory). We needed to examine some of the preserve land southeast of Poway for these same species. Fred Sproul who is a long time botanist in San Diego County and has actually lived near the edge of the preserve for the last 20 years was also along.

We worked our way back into the preserve land that is a complex combination of owerships. The unusual feature of this area is that it is a southern end of the Iron Mountain complex and the soil is derived from metasedimentary rock. Metasedimentary rock consists of sedimentary rock such as sandstone that has been heated and metamorphosed, changing its structure and converting it to hard edged rock. It is old rock, potentially of Triassic age, from roughly 200 to 250 million years old when it formed in shallow seas

(Walawender 2016). Some of the gold bearing rock around Julian is metasedimentary rock. In the central part of San Diego County, the metasedimentary rock behaves like the metavolcanic rock that supports unusual plants. That is true in this location and is the reason that we were surveying the area.

The weather was cloudy and dark. We went to a place where Fred had seen *Clinopodium* before. At first, we did not see any in the locations that Fred remembered, but eventually we did find it in the area, scattered on the NW facing slope in the moistest portion of the slope. *Clinopodium* has small beautiful white tubular flowers with an open lobed face and a clean spearmint scent. It is one of the plants that sticks in one's mind when you find it because of its combination of rarity, beauty, and strong memorable odor. This combination all makes it seem especially important.

I climbed up the ridge to the south and found extensive patches of Chamabatia australis (Southern mountain misery) in the midst of typical Chamisebased chaparral. Chamabatia australis is a fern-leaved shrub in the rose family with white delicate flowers in March and a strange oily, minty, glandular material on its leaves and stems. More typical members of this chaparral are *Arctostaphylos* alandulosa glandulosa (Eastwood manzanita), Cercocarpus minutiflora (San Diego mountain-mahogany), Ceanothus tomentosus (Ramona Ceanothus), and Quercus acutidens (Torrey's scrub oak) were growing in various mixtures on the slopes. Other notable plants Dendromecon included rigida (Bush Hesperoyucca whipplei (Chaparral candle), and the always delightful yellow-flowered Calochortus weedii (Weed's mariposa lily) with its three large yellow petals with brown hair-like structures near the base. On the more exposed south facing slopes, the whitish leaved Salvia apiana (White sage) with its garlicy scented leaves grew in contrast to the surrounding dark hued chaparral. Light rain fell briefly while I was up on the ridge. From that location, I could see in all directions. Except for a portion of the ranchland just east of the preserve lands, there was no evidence of habitation. The mountains northeast of San Vicente reservoir were visible. Cuyamaca Peak was visible in the direction to the east as well. The clouds were wrapped around some of the rocky peaks. The place was a wilderness. We traveled down one of the roads a little way and I hiked up onto another ridge. The sky was slowly beginning to clear from the earlier cloudiness and light showers. Part way up the ridge, I saw Xanthisma junceum (Rush chaparral-star), a non-descript greenish shrub with tomentose green, stick-like stems that

support delicate yellow flowers. They look like typical sunflowers, but with bright yellow disk and ray flowers approaching an inch in diameter. They appear to be much more fragile than one would expect in the drying habitat of gray-green and browning shrubs.

At the top of the ridge, I detected the sweet soapy odor of *Salvia clevelandii* (Cleveland sage). I looked around and saw a buck deer down below walking north east across the chaparral. It had a set of antlers that was of moderate size. To the west on the ridge was a doe. She stood still while I watched her and she even looked my direction, but only left after several minutes, walking slowly away. Black-chinned sparrows with their thin repetitive call could be heard along with the methodical song of the California thrasher.

I walked down slope to the north-east and came across the *Salvia clevelandii*. It was another indicator of the unusual rock and soil in this area. I walked farther down, back toward the road and the vehicle crossing through a small canyon and pushing through chaparral. In the openings of the shrubs large red flowered *Navarretia hamata* (Hooked pincushion plant) and its skunky odored stems grew in profusion. When I say large, I mean large for *Navarretia*, which means about 1/3 to ½ inch in diameter, but brightly colored pinkred. They have hooked spine like leaf tips and a glandular material that has a strong scent that is either agreeable for what it represents (wilderness, countryside, spring time) or disagreeable, if one is negatively inclined.

We walked down toward an old pond that is now dry. My role at that point was to walk along the toe of the slope to look for more *Clinopodium*. I didn't find any. I walked until I entered the end of the dry pond in deep grass and dried cattails. There, several deer bones were lying on the ground including the lower jaw bones and several long bones from deer legs that were broken. While these bones were not fresh, I had the feeling that I needed to get out of there. When I mentioned finding the bones to Fred, he asked if the bones were broken since he knows from experience when a lion in the past had killed a goat near his house that is not far from there. This is, as I mentioned, as close to wilderness as you will find west of Ramona.

We drove south onto another road that proceeds all the way down Foster Truck Trail, far into the lower canyon. We parked and I walked down for half an hour distance near the bottom of the canyon. As I walked, Rufous crowned sparrows sang with the lilting whistles and chirps. Farther down, coursing along the road, the vegetation changed to Coastal sage scrub

down in the lower elevations. Artemisia californica (California sagebrush), Malosma laurina (Laurel sumac), Salvia apiana, Rhus integrifolia (Lemonadeberry) and Eriogonum fasciculatum (Flattopped buckwheat).

SD County Parks and its partners, the Federal and State Wildlife Agencies, as well as the BLM and SANDAG, have worked diligently to create a preserve system in San Diego County. These lands are the result of those efforts as they continue. It is a true wild land in the urban fringe of San Diego County.

~ **Tom Oberbauer**, Vice President (Photos by the author)



East view.



East View with Cuyamaca Peak in the background.



Coastal Sage Scrub Transition.

Walawender, M. J. 2016. Geologic History of San Diego County. San Diego Natural History Museum. http://www.sdnhm.org/archive/research/geology/geo_intro .html

Post-Drought Comeback of Salt Marsh Bird's Beak at Sweetwater Marsh



In an amazing comeback, we counted >14,000 plants this year. A population that large has not been counted since the 1990s, a few years after Brian Fink seeded the species in Sweetwater Marsh as part of Caltrans' restoration program. Additional plants were visible inside the fenced Marisma de Nacion. Formerly Cordylanthus, southern California's endangered Chloropyron maritimus ssp. maritimus is abundant for now. but this plant has many needs that limit where and when it can survive. It's an annual, so it must grow from seeds every year; and those seeds won't germinate unless the soil is moist and reduced in salt and the canopy has openings for light to penetrate. At the same time it needs a suitable host plant nearby (not some weedy annual grass), so it can tap into perennial roots long enough to reproduce. Its flowers need special pollinators, preferably native ground-nesting bees. We know these facts from the research of Parsons, Fellows and Greg Noe (who counted plants in 2014, along with Janelle West).

Researchers also counted plants at Tijuana Estuary, the donor site for seed used to reintroduce the species to San Diego Bay.

Five researchers aimed to count every plant in a "bird's beak blitz," June 15-16, 2016, in Sweetwater Marsh, San Diego Bay, CA. Meghan Fellows, John Callaway, Lorraine Parsons, Sally Trnka, and Joy Zedler travelled from as far away as Virginia to resample the population that had dropped to fewer than 100 plants in 2014 (the third of four consecutive drought years). We did not know what to expect.

Post-drought Comeback of Salt Marsh Bird's Beak Sweetwater Marsh, San Diego Bay In an amazing comeback, we counted >14,000 plants this year. A population that large has not been counted since the 1990s, a few years after Brian Fink seeded the species in Sweetwater Marsh as part of Caltrans' restoration program. Additional plants were visible inside the fenced Marisma de Nacion. Formerly *Cordylanthus*, southern California's endangered *Chloropyron maritimus* ssp. *maritimus* is abundant – for now.

But this plant has many needs that limit where and when it can survive. It's an annual, so it must grow from seeds every year; and those seeds won't germinate unless the soil is moist and reduced in salt and the canopy has openings for light to penetrate. At the same time it needs a suitable host plant nearby (not some weedy annual grass), so it can tap into perennial roots long enough to reproduce. Its flowers need special pollinators, preferably native groundnesting bees. We know these facts from the research of Parsons, Fellows and Greg Noe (who counted plants in 2014, along with Janelle West). Researchers also counted plants at Tijuana Estuary, the donor site for seed used to reintroduce the species to San Diego Bay. Five researchers aimed to count every plant in a "bird's beak blitz," June 15-16, 2016, in Sweetwater Marsh, San Diego Bay, CA. Meghan Fellows, John Callaway, Lorraine Parsons, Sally Trnka, and Joy Zedler travelled from as far away as Virginia to resample the population that had dropped to fewer than 100 plants in 2014 (the third of four consecutive drought years). We did not know what to expect.

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 September 2016

9/6: Conservation Committee Mtg, p.4

9/7: **Board Meeting**, p.2

9/10: Garden Native Workshop (sold out)9/14: Gardening Committee Mtg, p. 3

9/20: **Chapter Meeting, p.1** 10/15: Native Plant Sale, p.3

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September 2016 Newsletter

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